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BALTIMORE, MARCH 15, 1900.

Notice!

The Manufacturers' Record is in receipt of numerous complaints from Florida and Georgia from people who claim to have subscribed for a "Weekly Record" which they say they thought was the Manufacturers' Record. The receipts which they send show that a written receipt for one dollar is given "for Weekly Record for one year," and in some cases for "one set of knives and forks."

The Manufacturers' Record knows nothing about the matter; has never before heard of the man who is collecting this money, and does not know where the "Weekly Record" is published. So far as we know, there may be such a paper, but if anyone is doing this work, claiming to represent the Manufacturers' Record, he is a fraud. Southern papers will confer a favor by republishing this notice.

Prizes Offered for Articles About the South.

In an exceedingly generous editorial commendation of the offer by the Southern Farm Magazine of Baltimore of ten fifty-dollar prizes for papers dealing with Southern agricultural, commercial and industrial life the Macon (Ga.) Telegraph says:

We are disposed to thus freely advertise this prize competition because it cannot fail to be widely useful. Not only will it bring out helpful, practical suggestions, tending toward the upbuilding of Southern industries, but everyone who writes a paper, whether it be the best one written or not, will be benefited by the necessary study of the conditions surrounding him.

In these sentences the Telegraph has defined exactly one of the main incentives to the planning of the prize competition—the desire to inspire the Southern people themselves to increased exertions for the material advancement of their section. The details of the announcement of the competition indicate its scope.

It is a motive to young men in technical schools to investigate the many circumstances of the pursuits which are to be theirs in contributing to the industrial growth of the South.

It is a spur to students of agricul-

tural colleges to show how the training they are now receiving is to be applied to the improvement of agriculture, while to the Southern farmer it gives an opportunity to study the mutual interests of manufactures and farming.

There are several hundred industrial and commercial organizations in Southern cities. Members of these bodies have a chance to present the results of their observation and experience as suggestions of value for the upbuilding of the cities and towns in connection with the encouragement of local industries, the extension of foreign and domestic trade and the relations with surrounding farming communities.

A problem cropping up here and there, generally as a result of artificial fertilization from the outside, concerns the relations of labor and capital. There is a tendency to attempt to solve this problem on lines which have proved disastrous elsewhere, depending largely upon political agitation and legislative enactments. There is a great deal of common sense in possession of the pure American labor of the South, and that common sense, it is believed, will be able to overcome any difficulties which may arise hereafter if it is permitted to escape the baneful effects of the labor agitator and the political demagogue. Many employees of cotton mills or iron companies are thinking earnestly on this line, and it is believed that some one of them will be able to present arguments which may be of immense practical value to his fellows.

With changed conditions and with widening opportunities for usefulness the women of the South are being brought face to face in larger numbers every year with the question of self support. Many of them still hesitate to engage in occupations in which they will come in direct competition with men. Already women have demonstrated ability not only to make a living in a field once monopolized by man, but to develop an entirely new field. Other opportunities of the kind exist. The woman who points them out most clearly and most conclusively, whether she is describing home life on the farm, the perplexities and pleasures of teaching or minor home undertakings, will be conferring a benefit upon her sisters everywhere, while many another will be led through her investigations to carve out her own career.

The preparation for the production of papers in the competition will be beneficial to the writers, as the Telegraph points out, even though they may not be among the prize winners. Ten persons will win prizes. For every prize winner one hundred young men or women ought to be touched through the competition with a lively personal interest in the factors working together for the growth of the South, which cannot fail to be influential upon a larger number. This will benefit the South, and will be the main reward of the Southern Farm Magazine's efforts. It

will help the South to win more substantial prizes.

The Bouyant South.

One of the most hopeful of recent opinions from the bouyant and progressive South appears in a letter of Mr. Walter Sharp of Norfolk, Va., in the Landmark of that city. He reviews the trend of events during the past years, expresses confidence that the passage of the currency bill will insure generous support to industrial enterprises, points to the substantial gains in the earnings of railroads as evidences of the stability of the present trade revival, and says:

The immense industrial development in the South, particularly in cotton and iron manufacturing, supplies a home market for every product, gives employment to all classes and makes a thriving and contented people where poverty was once only too familiar.

The increased price of cotton, lumber, iron, coal and manufacturing articles, all in active demand abroad, and leaving a big balance of trade in our favor (over one billion dollars last year), is ample to convince the most skeptical. The successful floating of a \$25,000,000 loan to Russia, not one dollar of which leaves this country, but is paid out for purchases of railroad iron, locomotives and coal, robs "Doubting Thomas" of all argument.

The activity of all shipbuilding plants and the establishment of new ones not only guarantees remunerative wages to skilled labor in that line, but shows that the output of every yard is needed.

This array of facts shown, as they are, in a presidential election year, when business depression is expected, inspires all thinking people with confidence in the future of this great country. Three years ago we would have been thankful for a small percentage of such favorable conditions; now the aggregation is so large and events crowd each other so fast that busy men do not stop to review the balance-sheet. For the South's share in this great tidal wave of opportunity one has but to read the encyclopedia of Southern enterprise, the Manufacturers' Record, to see the realization of dreams which were expected to materialize some twenty-five years hence.

In our own section the pessimist has long since been relegated to the rear, and new institutions, new buildings, new faces, new ideas and an ever-increasing faith are in evidence everywhere. No man of worth in any calling is idle of necessity, and the sunshine of prosperity beams brightly on all who make a well-advised effort.

In whatever direction one may turn in the South he is likely to find reflections of this optimism resting upon substantial foundations. Through the Piedmont section new cotton mills are rising here and there and established ones are preparing to enlarge their operations, while mill-building enterprises are likewise advancing through the Mississippi valley into Texas as a prospect for a larger and larger demand in the East for Southern-made goods widens. Side by side with plans for the full development of the iron resources of Alabama, Tennessee, Virginia and West Virginia are those for the extension and improvement of the railroads, really confined to no one section of the South. The lumber interests from the Carolinas to Texas are in flourishing condition, while the healthy tone everywhere is reinforced by activities in the oil fields,

the phosphate mines and other industries which supply the material for manufactures. The persistent strength of the cotton market, which at present seems destined to be maintained, at least until the movement of the next crop is well under way, is in itself a promise of vigor for several months in many lines of trade in the South. Individuals here and there may not yet perceive the marked improvements in general conditions. They, perhaps, alone are at fault. They have but to consult their next-door neighbors to discover that there is no ground for melancholy.

Meeting of Southern Cotton Spinners.

The programme announced for the meeting of the Southern Cotton Spinners' Association at Charlotte, May 10 and 11, includes papers by Theodore C. Search of Philadelphia on "Foreign Market for American Cotton Goods and the Way to Develop Them;" by D. A. Tompkins of Charlotte, N. C., on "Steam-Power, Its Economy;" by Sidney Paine of Boston, Mass., on "Electric Transmission;" by George Otis Draper of Hopedale, Mass., on "Improvements in American Cotton Manufacturing;" by A. H. Lowe of Fitchburg, Mass., on "Production of Finer Goods by American Manufacturers;" by James L. Orr of Piedmont, S. C., on "Legislation in Reference to Manufactures," and by Leonard Paulson of New York on "The Sale of Cotton Goods," while the speakers at the banquet will be United States Senator John T. Morgan on "The Isthmian Canal," and Mr. Clark Howell on "The Co-operation of American Cotton-Manufacturing Interests." A glance at the titles of the formal papers and other speeches and the names of their authors indicates that the last speech will be, in a certain sense, a climax of the two days' proceedings. Though the organization is primarily concerned with the interests of Southern cotton manufacturers, it is notable that of the nine speakers, five are from the North. They are, though, men who are directly or indirectly interested in the development of Southern textile manufacturing as a contributor to dependent industries and to the domestic and foreign trade of the United States. One of the Southern speakers, Mr. D. A. Tompkins, has long preached the necessity for a union of cotton manufacturers of all sections in work for the extension of markets for American cottons in foreign parts. He has deprecated the spirit which too frequently sees in the progress of one section decay for another. He has been one of the Southerners who now and then have appeared before the older organization, the New England Cotton Manufacturers' Association, and it is not unlikely that he is responsible for the fact that such a large proportion of Northern speakers will be the guests of the Southern body as a striking, practical example of the benefits of the

co-operation to which Mr. Clark Howell is to speak.

Foreign Views of the Cotton Supply.

Suggestive hints bearing upon the striking movements in the American cotton market are given by the organs of cotton buyers on the other side of the Atlantic. Three of them, published on March 3, reveal a feeling of decided apprehension about possible supplies of cotton in the near future which is calculated to maintain the strength of the market on this side. The London Statist says that it is difficult to exaggerate the serious nature of the position which the spinner has not yet appreciated. It estimates that the English spinners will require up to October 1 2,017,000 bales, against which the stock is 550,000 bales, at sea 200,000 bales, and reserves at the mills 125,000 bales, leaving 1,142,000 bales more to come from America before October 1. If this amount is not shipped it estimates that there will be short time in Lancashire for want of cotton after the Liverpool stock has been exhausted, and it weighs the probabilities as follows:

It is not unlikely that present or higher prices may draw out most of the cotton left in America. There were last Saturday 1,500,000 bales in view at ports and at counted interior towns. There still remains to come into sight the remainder of the crop, say 1,500,000. But the state of trade in America is so good and the continental spinner is so eager a buyer as to make it increasingly improbable that Lancashire can receive all the cotton it requires without considerable difficulty, and possibly a really high price. The tension is therefore likely to last for some time, and sooner or later to force prices. Lancashire has let the American and the continental spinner buy, and now stands to be left out in the cold as a penalty for her neglect of ordinary business precaution. The trade will no doubt wake up presently to the actual situation, but possibly when it is too late to avoid the consequences.

Cotton, the official journal of the Manchester Cotton Association, presents a number of facts and expresses the hope that by the end of the month it may be possible to know what the supply is likely to be. Its mystification, however, is revealed in the following words:

At the present time, however, the whole question of yield, and particularly the share thereof we are to get, is an enigma. No one has the power to forecast the future movements to the ports or their destination. The upholding of prices, notwithstanding the present movement both to the ports and for export, is rather flabbergasting. Doubtless the principal cause is the short local supply, the uncertainty as to when and to what extent it is to be augmented, and the actively-increased consumption.

The Textile Mercury, also published at Manchester, finds the market still under the influence of the factors which have disturbed it, and says:

The serious phase of the question, not yet apparently fully recognized, is the great deficiency of the proportion of the crop that Lancashire trade has secured. Our imports up to the close of last week are 1,500,000 bales fewer than last year, and 1,000,000 less than the corresponding period of the season 1896-97, when the crop was a little less than 8,750,000 bales. For the corresponding periods the Continent has taken about 400,000 bales less for the first position and 250,000 bales more than in the second one. Thus the burden of more than one-half of the entire deficiency, probably three-fourths of it, will fall upon Lancashire, and for what it does get it will have to pay the present enhanced price, if not a higher one. It is not the first time, we are sorry to say, that the trade has been caught in this way. Is it not time a little more quickness and acuteness of perception was displayed, and means taken by the trade independently to assure the receipt in due time of more reliable information than it at present gets? We think it is.

The Mercury offers little consolation to those who had relied upon exagger-

ated estimates of the American crop in the fact that those estimates have now been reduced. But it traces a growing disposition of all sections of the trade to place at least their more urgent orders to the acknowledgment that what had hitherto been regarded as a reliable estimate had been acknowledged to be a failure.

The plight into which the English cotton buyers have fallen ought to be a warning to the American cotton-growers now planning for the coming season's crop. They should bear in mind the influences which have contributed to the increase in the price of their staple during the past six months, and should not forget the fact that cotton buyers are in the long run better able to fix the price of cotton than the cotton-growers, however present facts may seem to point the other way. Their duty is to act so wisely now in planting that they may steer safely between the Scylla of a crop too short to meet next season's demands, an encouragement to increased competition elsewhere in growing, and the Charybdis of so great a crop that the buyers will have them at their mercy. The path of safety lies along the cultivation of a crop that will bring the grower to comfort and safety, whatever the price of cotton may be.

A new loom for which strong claims are made is being put on the market by the American Loom Co., of which Mr. John E. Searles is president. For several years experts have been at work perfecting this loom, and the claim is now made that its merits are so great as to command the attention of all cotton manufacturers. With the remarkable growth of cotton-mill interests in the South every improvement in textile machinery becomes of vital interest to this section.

In a letter to the Manufacturers' Record the Electrical Engineering Co., Charlotte, N. C., writes:

We are pleased to tell you that through the advertisement on your second-hand page we have sold two second-hand dynamos—one in Southwest Georgia and one in Northern Georgia, and could have sold two or three in North and South Carolina if we had had them; so we think this particular page is very profitable if anyone has anything really good in second-hand apparatus.

Graphite Land Wanted.

The Manufacturers' Record is in receipt of an inquiry for graphite or plumbago. Parties having graphite properties are invited to send information to "E. J. R.," care of Manufacturers' Record.

The February number of the Southern Trade Journal of New Orleans is a special Crowley (La.) edition, devoted to a description of the progress made by the flourishing community, now the center of the great Louisiana rice belt, where twelve years ago there was no town, while the surrounding country was an open cattle range. The Trade Journal makes special mention of the Duson brothers, W. W. and C. C. Duson, who have been foremost in efforts to build up the town.

The American Colonial Trading Co. has recently been organized to engage in rice cultivation in the Philippine Islands. It expects to pursue this industry on a large scale, and desires information on rice-cultivating and rice-milling machinery. It also desires information and prices on sugar machinery. The company's American representative is Mr. L. D. Thornton, 42 West Twentieth street, New York city.

FARMERS AND FUTURES.

Suggestions from New York Regarding a Project for Cotton-Growers.

By Col. Alfred B. Shepperson.

Compared with two weeks ago, spot cotton closed today one-half cent higher here and three-eighths of a penny higher in Liverpool, while New York futures are thirty-seven to fifty-five hundredths of a cent higher for this crop, and thirteen to seventeen points higher for the next crop.

The highest quotations of the season were reached on 6th inst., when spot cotton was one-eighth of a cent higher here and one-eighth of a penny higher in Liverpool than today, while the highest sales of futures for this crop were nineteen to forty-one hundredths over today's closing prices.

The sharp reaction and decline here and in Liverpool on 7th and 8th were perfectly natural after the constant and rapid advance which had occurred. It was remarkable that the reaction did not come sooner, as it was inevitable.

The situation in respect to the present and prospective supply of cotton and the demand for the staple is practically unchanged. The receipts of our crop in March have been liberal, and will probably continue on a fairly liberal scale for some weeks. It may be safely assumed, however, that only a small proportion of the receipts will be for sale, as the bulk of the cotton will be simply going forward in fulfillment of sales previously made.

Whatever the crop may be, it is perfectly evident that there has been an unequal distribution of it, inasmuch as Great Britain and the Continent have not received their share of it according to the capacity of their mills and the extent of business they are doing. Great Britain is in a worse condition in this respect than the Continent.

The quantity of cotton now in Liverpool and at sea for British ports is 1,063,000 bales less than a year ago, and very much below the corresponding time of any year since 1889. It exceeds that year by the trifling matter of 37,000 bales, but the present annual consumption of the British mills is just 500,000 bales (of 500 pounds net) greater than in the season of 1888-89. Some people here and in Europe who wish cotton to decline are circulating privately and publicly all kinds of cunningly-devised figures to show that less cotton will be needed by the mills than the large volume of their business would induce the public to believe. All the figures of the cleverest statisticians will not add a bale of cotton to the crops of the world nor cause the mills this season to consume a bale less than their full capacity so long as they can sell their product.

A large reduction in the supply of cotton caused by serious shortage in the crops of America and India occurring just when the mills were generally doing an unprecedentedly large and profitable business caused a great advance in cotton. This result was perfectly logical, and it seems to me equally clear that reasonably good prices for spot cotton should generally prevail until the supply of cotton exceeds the legitimate demand for it. This can hardly occur before October 15 to November 1, though if in the summer the new crop promises a large yield, future contracts for new-crop delivery would probably decline, and might even go considerably lower without materially affecting the price of spot cotton.

There has recently been some discussion in the papers of the idea that Southern farmers should sell on the basis of

New York futures for September and October delivery their crops of cotton which have not yet been planted.

No farmer could sell his crop on the basis of prices for September and October delivery unless he agreed to deliver it during those months. He could deliver only a small proportion of his crop by that time, as picking usually goes on until December, and sometimes much later. He could only sell with safety for delivery in November and December, and New York futures for these months are nearly half a cent lower than for September delivery. The present price for November delivery would leave the farmer, after paying freight, commissions and other charges, about seven cents per pound for middling cotton. This should not be regarded a very tempting price, since it has been exceeded during every calendar year, with only one exception, since 1826.

Should the farmer sell now for delivery next fall or winter, and prices before then should advance from any reason, he would have to make a deposit of money equal to the advance, and the raising of this money might prove inconvenient and expensive. If the farmer should sell more than his crop turned out to be, he would then have to buy of his neighbors to make up the quantity. In the event of higher prices ruling at that time than he had sold at, he might thus suffer a considerable loss, besides having to part with all of his own crop at a lower price than his neighbors were receiving.

The classification of cotton is much stricter here than in Southern markets, and especially in the small towns, and this would operate to the disadvantage of the farmer in delivering his cotton upon New York contracts for futures.

If sales are made of futures here against a farmer's crop, the better plan would be to sell the spot cotton upon its merits in the nearest home market as each 100 bales are ready, and to cover the sales of futures in New York as fast as the actual cotton is sold.

The larger portion of the crop is grown by farmers raising less than 100 bales, and as this is the least quantity for which a contract for future delivery is made in New York, it follows that only the farmers who raise over 100 bales could sell futures against their crops.

For a farmer to sell futures for more than his crop would be a purely speculative transaction to the extent of the excess.

If, from the condition of his crop late in the summer, the farmer should feel reasonably confident of making 200 bales of cotton, it would be wise, perhaps, to sell 100 bales for November or December delivery against his crop if the price was satisfactory. This would be safe and perfectly legitimate, and is frequently done through the Southern factors.

The old adage that "a shoemaker should stick to his last," though very homely, is nevertheless true in a general way, the exceptions but serving to prove the rule. A farmer should not try to be a speculator. His training, his environment and his facilities are all against his success and handicap him in the struggle with men of keener wits, greater opportunities and less innate honesty.

Let the farmer use better and more scientific methods, studying closely the needs of his soil so as to get the greatest yield at the least cost of production. Let

him buy nothing which can be produced at home.

More careful cultivation and the proper selection and more liberal use of fertilizers would give far better results to the cotton-growers than the large increase in acreage, which is now so generally expected.

New York, March 13.

A GEORGIA VIEW.

Mr. William S. Witham's Opinion About Advance Sales.

In reply to inquiries on the subject of selling the crop in advance, made by the Manufacturers' Record, Mr. Wm. S. Witham of Atlanta, Ga., writes:

"It is illegal in this State to sell or mortgage a crop that is not already out of the ground and growing. So you see it is only a moral obligation on the part of the farmer to deliver in this State."

In reply to the question whether growers are likely to be benefited as much by an agreement to sell all their crop at a certain price as they would be by depending upon a possible condition of the market in the fall justifying present offers of seven or eight cents a pound, he writes:

"As the cotton costs five cents to raise, and as the price will certainly open at eight cents or more this fall, and as the average price will be over seven cents, even if a 13,000,000-bale crop is raised you can figure an answer to your question. If I were a grower I would not sell under an eight-cent guarantee."

"There are no 'all-cotton farmers.' Nearly everyone raises his own corn. Fruit crops are sold before ripening. The purchaser takes all chances in gathering, shipping, selling, etc. It looks like cotton is going to drift into that method. I advise the farmers against this kind of contracts."

A MANUFACTURERS' ALLIANCE.

Suggestions as to Cotton and Cotton-Oil Mills.

Editor Manufacturers' Record:

Permit me to add a word to the strong arguments made by Dr. Dabney and Colonel Killebrew in the Southern Farm Magazine in favor of the new French treaty and in aid of their effort to rouse and unite Southern sentiment in the subject.

Every oil mill that has not already used every ounce of its influence with Congress in this matter should send for and get this March number of the Southern Farm Magazine and learn the facts as they are clearly and forcibly presented in the two articles I have mentioned.

These articles emphasize as none others that I have seen do emphasize the all-important fact that the price of cottonseed depends upon the price of oil, and that the true interests of oil mills and planters are one and the same, and both will be served in an incalculable degree by the signing of this treaty.

This is no ordinary matter, but one of the highest and most vital importance to the whole South. While, unfortunately, no amount of legislation can influence the price of cotton, the price of cottonseed and of cotton oil not only can be, but have been peculiarly subject to legislative action, both on the part of the States and of Congress. Unless the law has been recently repealed, all the cotton oil which goes into artificial butter is taxed by the United States government three cents a pound, or twenty-two and one-half cents per gallon, while the great majority of Northern and Western States, and, I regret to say, some Southern States, are doing their best by all sorts of peculiar legislation to destroy this use for cotton oil altogether.

Such a condition could never have existed had the Southern people been alive to their own interests and unitedly opposed such legislation.

How different is the attitude of New England toward any question that affects her interests. Her people rise as one man to protest or to second as the matter may be injurious and beneficial. Yet where have we ever seen even those directly interested in the cotton plant—the planters, oil mills and cotton mills—united and working shoulder to shoulder to secure advantages for Southern trade or manufactures or to prohibit restrictions of it.

There ought to be the same simple organization of each of these three interests with a view to promoting beneficial and checking injurious legislation in reference to the cotton plant and its products, and an offensive and defensive alliance between them.

I want specially to appeal to the Southern cotton-manufacturing industry, that young giant that doesn't know its own strength, that New England would gladly throttle an industry that is destined to have more than one legislative fight against overwhelming odds in the near future, and which ought to make and keep all the friends it has. It ought to be keenly alive to everything that affects the cotton plant in any particular, and anything which promotes the market for cottonseed or cotton oil, thereby reducing the expenses of raising a crop of cotton, as they view it, is a matter of dollars and cents to the cotton mills.

The Southern Farm Magazine advises the farmers to unite and agitate in favor of this treaty. Let the Manufacturers' Record call upon the manufacturers, cotton mills and oil mills to join hands immediately, without an instant's delay, and demand the signing of this treaty. If the cotton mills rally to the assistance of the planters and oil mills now they can count on the help of planters and oil mills as they have never done before when special legislation affecting them is to be acted on. What public-spirited cotton manufacturer will take this up?

The interests of the cotton mills and oil mills are far closer than either of them realize at present, and it will be my pleasure at an early day to point this out in full and do all within my limited power to promote good relations between them. Now, however, is the time for action, not for words. Let any man directly or indirectly interested who reads these lines sit down immediately and write his congressman that he will find his fences broken down beyond repair and some other fellow's cows in his corn if this new French treaty opening up a market for millions of gallons of cotton oil is not passed.

A wider and better market for cotton oil can hurt nobody. He who refuses to help secure such a market is no friend of the South or of the cotton plant.

EDWIN LEHMAN JOHNSON.

Fort Hill, S. C.

At the annual meeting of the Business Men's League of Hammond, La., E. Richardson was elected president; E. P. Willis, vice-president; E. K. Russ, secretary, and W. R. Watson, treasurer. The league is interested in the proposed railroad from Gulfport to Baton Rouge, La., and will endeavor to have Hammond located on the route.

According to the report of Assistant Commissioner of Labor R. A. Shiflett of Tennessee, 3,736,134 tons of coal were mined in the State in 1899, an increase of 641,386 tons; 440,157 tons of coke were made, an increase of 47,612 tons; 667,149 tons of iron were mined, an increase of 49,770 tons.

GRAIN FOR EXPORT.

A Study of the Movement Toward Southern Ports.

Members of the Trans-Mississippi Commercial Congress, which will meet next month at Houston, Texas, and, in fact, everybody who has studied the effects of the development of the trans-Mississippi agricultural region in its relation to American commerce, and especially of that portion which finds outlet by the Gulf ports, will be interested in a monograph on the grain trade of the United States just published by the bureau of statistics of the Treasury Department. This is the first of a series of studies upon the production and transportation of the great staples, and upon the internal commerce of the country. The present article points out the immense increase in the agricultural production of the country, the rapid and continuous westward shifting of the area of cultivation and the changes in the routes by which Western grain reached the Eastern consumers and the European markets. The development of the grain production and trade is traced from colonial times to the opening up of the Mississippi route by the purchase of Louisiana, when the shallow barges and later the steamboats descended the Mississippi, and New Orleans shipped grain to New York and Boston. After the completion of the Erie canal in 1825 and the settling of the Lake Michigan territory, the great bulk of the Western grain traffic moved eastward over the lakes and the canal, and New York became the great grain-shipping port of the country. The discussion shows how from Chicago a network of railways radiated to all points and acted as tributaries to the lakes, and later how the unified and amalgamated railways competed with the lakes for the east-bound traffic. The traffic in corn and flour was diverted from the lakes to the railroads, and while the lakes regained part of this lost traffic later, the Erie canal was unable to compete with the railroads from Buffalo, and grain which formerly reached tidewater at New York is now largely diverted to Philadelphia, Baltimore and more southerly ports. The struggles of the railroads and of the ports among themselves are described, and the history of the existing rate differentials is given, but the report confines itself to history, and does not discuss policy or forecast future developments.

The monograph also presents what appear as the two most recent developments of the grain trade of the United States—firstly, the partial diversion of the wheat and flour trade from Lake Michigan to Lake Superior ports and the rise of a great milling industry at Minneapolis and Duluth-Superior; secondly, the increased movement of grain (and notably of corn) to the Gulf ports, partly by river, to a greater extent by rail from St. Louis and nearby points, and to an ever-growing extent by direct rail routes from cities in the Southwestern corn belt. Touching southbound grain traffic the report says:

"It is rather in the traffic which formerly found its way to the eastbound railroads than to that which fell to the lakes that the southern route found an opportunity for competing. As early as 1872 the Windom committee had discovered that the eastbound railroads, in their competition with the lakes, controlled the traffic of Illinois and Indiana south of a latitudinal line sixty miles south of Lake Michigan; but with the effective competition of the southbound railroads much of the grain in this district was carried either by rail to Cairo and by barge to New Orleans, or directly to New Orleans by rail. The westward movement

of the corn district has equally the effect of making this region nearer to New Orleans than to the Atlantic ports.

"The character of this movement south may best be studied in the case of St. Louis. The position of that city, near the junction of the Missouri and Mississippi rivers, and its favorable location as a railroad center, makes it the terminal for a large grain traffic, and St. Louis has become increasingly dependent on the southern route. It is not, however, the river traffic which has profited by this change.

"The grain shipments of St. Louis have increased about 20 per cent. during the last fifteen years. From 1878 to 1880 there was an annual average shipment of 37,000,000 bushels, from 1881 to 1885 an average annual shipment of 40,000,000 bushels, from 1886 to 1890 of 45,000,000 bushels, from 1891 to 1895 of 44,000,000, and during the two years 1896 and 1897 of 44,000,000 bushels. The shipments by means of the lower Mississippi river, however, while they increased from an average of from 3,560,000 in 1875-1879 to 10,900,000 in 1880, decreased to 10,100,000 in 1885-1889, and to 7,300,000 in 1890-1894. This traffic, therefore, which formed 27 per cent. of the total from 1879-1883, and 22 per cent. in 1884-1888, constituted only 17 per cent. from 1889-1893. As the lower Mississippi river traffic formerly constituted practically the whole, it may be seen that the railroads have gained largely upon the waterways. The movement by water during the last twenty-four years has fluctuated violently with variations in the conditions of the river, but on the whole it has just about maintained itself, the average shipments for the last dozen years being about 4 per cent. larger than for twelve years previous, although the total grain shipments from St. Louis by all routes have increased more largely during the same period."

"Regarding the grain trade of New Orleans the New Orleans Times-Democrat annually published the statistics of the river, rail and ocean traffic of that city, but did not separate the portions of the traffic carried on each route. While it is therefore impossible to show statistically the exact extent to which the railroads have absorbed the river traffic in grain at New Orleans, it is quite clear that such a development has taken place. * * In 1897 72 per cent. and in 1898 92 per cent. of the flour arriving at New Orleans came by rail; of the corn, the railroads transported 83 per cent. in 1897 and 85 per cent. in 1898; of the oats, 68 per cent. in 1897 and 75 per cent. in 1898, and of the wheat, 86 per cent. in 1897 and 77 per cent. in 1898. The very inconsiderable receipts of rye were by water, 100 per cent. in 1897 and 94 per cent. in 1898 arriving by that route.

"The railroad contributing the major part of these grain receipts was the Illinois Central. In 1898 that railroad carried 38 per cent. of all the flour, 96 per cent. of the corn, 79 per cent. of the oats and 56 per cent. of all the wheat arriving by rail. The Texas Pacific, the New Orleans & Northeastern, the Louisville & Nashville and the Southern Pacific carried considerable quantities of flour, and each of these roads, with the exception of the Louisville & Nashville, brought in large quantities of oats. Of the total rail receipts of wheat, 56 per cent. were hauled by the Illinois Central, 37 per cent. by the Texas & Pacific and 7 per cent. by the Southern Pacific."

Regarding the diversion of the grain trade to South Atlantic ports the monograph says:

"The most salient features of this development have been the decline of the

canal and the phenomenal use of the port of Newport News. As the railroads leading to New York have continued to obtain a fair share of the traffic, the diversion of the traffic from New York is to be attributed to the failure of the Erie canal.

"To a considerable extent the diversion of the grain traffic has been due to corn, a great part of which is not tributary to the lakes, and which consequently would be less affected by an improvement in the Erie canal, which joins New York and the Great Lakes. To a large extent also the Gulf ports are participating in this corn traffic. In the year 1896 the various ports exported corn in the following order: Baltimore, New Orleans, New York. Since 1896 New York has partially regained its old position, and is now (1899) second only to Baltimore in its exportation of corn.

"The changes which have taken place in the internal grain movement have been largely due to a change in the center of production of the cereals, which, in turn, has been materially influenced by the conditions of internal transportation and the cost of reaching the Eastern and European markets. The center of wheat and corn production has pushed steadily westward, the wheat belt to the north-west, with Lake Superior as a base, and the corn belt lying further to the south.

"The westward movement of the center of the corn belt has been of the greatest importance in altering the general trend of the corn traffic in this country. The tendency in this country seems to have been to a greater and greater differentiation of the agricultural production, and with the increase in the portability of corn the center of the corn belt has moved farther away from the center of population of the country."

The Texas Oil Field.

[Special Cor. Manufacturers' Record.]
Corsicana, Texas, March 8.

A report of the oil field for month ending February 28 showed 451 producing oil wells, and very active operations will be carried on during this year.

Mr. J. S. Cullinan of the Refinery Company has just returned from the East, and talks encouragingly of the prospects of being able to handle the heavy lubricating oils found in a new field near here by Mr. T. C. Stribling.

Mr. O. B. Colquitt, who helped to frame the tax bill for which a special session of the legislature was called, and which was defeated largely through the influence of Hon. Roger Q. Mills, Representative R. E. Prince, Senator B. H. Johnson and other business men, who were very ably supported by the Daily Sun of Corsicana, was here this week in search of some good leases, which he and friends propose to develop.

Extensive additions will be made to the building of the I. O. O. F. Widows and Orphans' Home here. Bids for the work are being advertised for.

The Southwestern Dry Plate Co., with a capital of \$60,000, was organized here by S. W. Bogy, Charles W. Quinn and W. N. Bullard. A charter will be applied for at once. Purpose is the manufacture and sale of photographic dry plates and other photographic supplies. A limited amount of the capital stock only will be sold.

Mr. Ben. Rosenbery has plans for the building of a three-story brick business house.

Mr. S. C. Fullerson reports progress of maturing plans for the cheese factory as very favorable. S. W. BOGY.

The Southern Hardware Jobbers' Association will hold its next annual meeting at Old Point Comfort, Va., June 13, 14 and 15.

MORE COMMON SENSE.

Suggested by Senator Jones' Interest in the Round Bale.

[Raleigh (N. C.) Morning Post.]

Some days ago The Post took occasion to protest against the current disposition to condemn men simply because they had invested their money in enterprises or implements which were not only sanctioned, but protected by the laws of the land, through patent as well as other legislation. The round-bale machine was the immediate enterprise discussed, provoked by animadversion upon Senator James K. Jones of Arkansas, who is a large stockholder in the company owning the patent rights and manufacturing the round-bale machine.

A few days later the following letter was received from Senator Jones:

"United States Senate,

"Washington, D. C., March 5, 1900.

"Robert M. Furman, Esq., Raleigh, N. C.:

"My Dear Sir—Some one has been good enough to send me a copy of your paper with an editorial about me and my connection with the American Cotton Co., and I write to thank you for the very courteous, clear and perfectly just way in which you have treated the subject. There is only one mistake in your editorial, and that is, the statement that I am a man of wealth. My connection with this enterprise began with its inception, and I spent a very considerable part of the limited means I had in its early stages, and I believe but for my persistent and continued faith in it, the entire matter would have fallen through long ago. I believe the invention is to be of very great benefit to all cotton-growers and cotton manufacturers, and, having spent what little means I had in developing the enterprise, and never having received a dollar from it up to this time, I hope eventually to be compensated for my risk and labor in getting it into practical shape. I thank you very sincerely for the spirit and manner in which you have treated the subject.

"Very truly yours,

"JAMES K. JONES."

After expressing sincere regrets that we were mistaken as to the wealth of Senator Jones, we will call attention to the statement of the senator that up to this time he has never received a dollar upon his investment in the enterprise. Here is an invention protected, and, we may say, created by the laws of the country, for which is claimed great merit. The letter from the consul above quoted would seem to sustain the claim of merit. A North Carolina mill man told us a few days ago that his mill, and no doubt others, paid one-sixteenth of a cent more for the cotton put up by this round-bale process than by the old method, which is additional evidence that it possesses merit.

To manufacture and put this invention into operation required a very large capital, such that but few men were willing to risk in an experiment, and only through great faith and the combination of the money of a number could it be undertaken at all.

And yet the men who did put their money into it, and as yet received not a dollar in return, are to be held up as public enemies and robbers and oppressors of the people, and their property or its usefulness, let it be more or less, destroyed merely to satisfy an anarchistic spirit which has been fanned into dangerous existence by the populist wave which has well-nigh overrun this country of late, sapping the consciences as well as the judgment of men.

And this is but an illustration of the treatment accorded those engaged in hun-

dreds of other perfectly legitimate enterprises. Through corporate organization only can the most useful inventions and utilities of this age be made available, and yet the howling demagogue, without reason, but not without price always, either in hand or in expectancy, unite in wholesale denunciation of men engaged therein. The Post protests against this, and condemns the spirit that animates such, let it come from whatever source it may.

Now, if the round bale possesses the advantages claimed for it, it will soon so impress itself upon the farmers, as it ought, and who ought to avail themselves of the method. The testimony of the consul as to its advantages for export, and of the home mill men as to its value to them, will soon convince the farmers of their interest in the matter; and if it shall maintain this advantage, that farmer who will refuse to use it because it is owned by a "corporation," the members of which may become "rich" through its acceptability and use by the farmers, should have a guardian appointed. Farmers do not all own gins or compresses; if one gin will serve the farmer better than another, by which said farmer himself can get an advantage, he will, as he ought, patronize that gin; and it is worse than cruel by slander, actuated by either personal or partisan motives, to prejudice the honest farmer to his own hurt, as well as do injury to the honest efforts of men engaged in the legitimate industries of the country.

It is time the people generally and farmers in particular were kicking aside these unscrupulous self-appointed "guardians of the people and the people's rights," study each and every thing offered or measure proposed, and, like sensible men, considering their own interests, adopt those that are true and which can best subserve them and their welfare.

If the round-bale process is the best for the farmer he should honestly be told of it. And let the crusade against legitimate enterprises be stopped.

We have no interest whatever in this nor any corporate or other enterprise, directly or indirectly, immediate nor remote, in esse nor in posse. We can say with equal positiveness and truth that we sincerely regret we have not. We would most cheerfully become the owner today of stock in very many of the industrial and corporate enterprises were we able, some of which are the common objects of just such abuse as has been heaped upon that which Senator Jones is promoting. So much as to the interest we do not have, and also the real interest we would rejoice to have in this and kindred enterprises.

[To these very strong points The Post might have added that but for the power of aggregated wealth brought together into corporations the wonderful coal and iron resources could not be developed nor cotton mills be built to spin the South's staple product at home. The Manufacturers' Record has always taken the position that if the round bale is to win it must be solely upon its merits as a saver to the planter of useless charges now heaped upon cotton. If it is a benefit to the farmer, as the most overwhelming testimony proves, as well as to the spinner, then it is folly to try to hoodwink the public by denouncing it for purely personal selfish interests.—Ed. M. R.]

The Nashville Chamber of Commerce has elected Capt. A. J. Harris, president; H. W. Butterff and W. C. Collier, vice-presidents; L. R. Eastman, secretary, and W. D. Gale, treasurer.

IF SELLERS COULD SUPPLY.

The Birmingham Iron Market Would Be Active.

[Special Cor. Manufacturers' Record.]
Birmingham, Ala., March 13.

Since last letter the market in iron has shown an improvement as to the demand, and greater uniformity as to price has prevailed. There has been no complaint as to cutting of prices, and without any concert of action all maintain about the same level of values. There is so little rivalry for the business offering that the temptation to lower values is only nominal; in fact, some have sold more than close up, owing to disappointing results of furnace output, and have had to enter the market as competitors to purchase the grades on which their deliveries were short. All have found that there were lapses in the production of certain grades, the result of furnace workings. The importunities of clamorous buyers for their deliveries led to a good deal of hustling to find lots to fill in the deficiencies. Some are as yet behind on their deliveries, with the prospect for catching up in the near future anything but good. Large buyers, whose requirements are pretty closely approximated, have been coming into the market and limiting their inquiries to a fractional part of the total set down to them. And in some cases these scaled-down orders have been pruned again by the sellers. This conservative action, which, on the part of one set, limited orders to avoid exciting the market, and on the part of sellers, further restricted them to be within the probability of delivery, has kept the market on a pretty even keel, with variations in price of no moment. But when made the news spread fast and led to strenuous assaults on the market. It has stood them all without flinching, and sellers are now indifferent if their prices are declined. Inquiries have been increasing, and sales have been larger. The market would be an active one if sellers could supply buyers' wants. In this state of affairs selling agents are almost unanimous in reporting increased prospects for a good demand in April. How it can be supplied is the problem now before the sellers.

There is little or no prospect for increased production in the near future. The Tennessee Company will have its fifth furnace at Ensley in blast in April, but by that time it will turn another furnace on to the production of basic iron. The Williamson furnace could go into blast whenever the supply of material can be assured. There will be no hurry about the Mary Pratt furnace, as it will be three or four months before a regular supply of material can be assured for it. So we will be doing well to maintain the present production. The market is quoted yet on a basis of \$17.50 for No. 2 foundry. There is a small accumulation of white iron in some furnace yards, but it is of no moment. One moderate order would clean out all of it. There is some export business doing, but it is very limited, and as far as can be ascertained, only when circumstances are all favorable. Some old business is being cleaned up as fast as possible, and to those not posted it is credited as new business.

The rod mill was started the past week to test the smoothness of the machinery. The perfection of detail and the utilization of every practical device for ease and rapidity of handling are marvels of adaptability of "means to an end." The steel billets go from the steel mill, adjoining to the rod mill, on conveyors, are there received and come out as wire or rods without the intervention of human hands. The delay in delivery of the en-

gine for the finishing department will prevent the full operation of the works for two weeks. Think of fourteen acres under roof and all filled with a world of machinery, and you can have something of a definite idea of the magnitude of the plant. When in full operation 1000 workmen will be employed. Our minor interests are all full of work. The Birmingham Boiler Works will erect for the electric company the largest metal stove stack in the State, it being 150 feet high, 25 feet at the base and 12 feet at the top. On every hand as spring advances the evidences of substantial improvements grow stronger and stronger. It will be a year of great growth for this district.

J. M. K.

Eastern Iron Markets.

(Special Cor. Manufacturers' Record.)

Philadelphia, Pa., March 13.

The situation of the iron and steel trade throughout the Eastern and Middle States has not made much progress since a week ago. There are more inquiries, and these inquiries are for larger quantities of material. Locomotive works, bridge works and all large plants are looking after supplies for the coming summer and fall. It is hardly likely that such a large rush of ordering will take place as last year. The impression is quite general that a reaction in prices is likely to occur, but impression is on the part of buyers. Manufacturers, on the contrary, do not agree that any downward tendency is very likely. Of course, the plate-mill capacity has been very greatly extended within the past year, and in consequence plates are cheaper. Structural material rules high and firm, and orders during the past week amounted to over 15,000 tons, all of which were placed at full prices. Very little business was done in steel rails last week, and what orders were reported were placed at \$35 for standard sections and \$38 to \$40 for light sections. Bessemer pig is active, and plenty of it sold at \$24 at furnace. Basic iron is wanted, but there is very little to be had. Foundrymen are holding back, hoping against hope that foundry will drop 50 cents per ton. Forge iron continues weak, but there is not much room for any further drop, according to the makers. Brokers representing buyers are advising a cautious hand-to-mouth policy of forge iron, thinking there will be a heavier reduction by April or May. The entire iron trade is up to all expectations. The coming year will be one of exceptional activity. Wire nails are scarce and active; cut nails are strong for the present. Skelp iron is strong, and several inquiries are in hand to cover the requirements of the projected trolley lines. Electrical equipment is in very active demand, and all over big works are all oversold for months ahead.

The Iron and Metal Trades.

(Special to Manufacturers' Record.)

New York, N. Y., March 15.

In its weekly review the Iron Age says: "Those who have been looking for a slump in iron and steel continue to meet with disappointment. Our advice this week are more encouraging than for some time. Bessemer pig-iron at Pittsburg is stronger than it has been since the opening of the year. Large consuming interests are buying, and it is said that practically all the surplus to July 1 has been sold. Foundry iron is rather inactive at the great consuming centers, but producers are not exerting any pressure to sell. The production of regular grades of foundry pig is still being kept down by the scarcity of coke. The regularity of operations is interfered with, and furnaces are turning out a larger proportion

than usual of the lower grades. Some weakness is found in these grades, but it is not sufficient to unsettle the market.

"With the foundation for the iron trade in this condition the values of finished iron and steel are strongly maintained. An improved feeling is reported; in fact, on almost all kinds of finished product, and large transactions are developing, which are expected to give a still better tone to matters. Proposals are now being invited on the New York rapid transit tunnel, which will take 77,909 tons of material, including 64,944 tons of beams and riveted work.

"A great deal of structural work for buildings is also about being placed, both in this city and at other points along the seaboard. Report has it that one of the large Western implement makers is in the market for 16,000 tons of steel bars and shapes for the last half of this year.

"Nothing new has developed in the export trade, but many inquiries are being received for various kinds of material, and some orders would probably be placed but for the difficulty in securing freight room. Wire nails and wire, however, are going abroad in large quantities, reported to aggregate over 600 tons daily.

"The corner in pig tin has been broken, and prices have declined materially. Copper, on the other hand, is stronger, with a reported sale of 1000 tons of electrolytic for export at sixteen and one-quarter cents."

New Orleans' Development.

Mr. George Gould has recently been in New Orleans, and in an interview relative to the development of the port is quoted as saying:

"We consider that this is the coming port of the South. Situated, as New Orleans is, at the mouth of the great Mississippi valley, I see nothing in the world to prevent the city becoming more and more important as an export and importing point. The Texas & Pacific Railroad Co. feels this, and we are prepared to do all in our power to help along the city, for this is our only port, the one to which we look with the greatest hope for the future. The company is cutting down grades, buying new engines, more cars, etc., all in anticipation of a big business another season, and we feel sure the future will prove very bright."

In speaking of foreign steamship lines in connection with the Texas & Pacific Railroad Mr. Gould said:

"We would have had the line inaugurated, but the Cuban war came on, the prices of steamships went up 40 per cent. higher than before, and such an investment required too much capitalization; but as I tell you, we regard New Orleans the coming seaport of the South. There is no other conclusion to be reached, for here you have a safe harbor, accessibility by railroads to all portions of the country, and, above all, are at the outlet of the great Mississippi valley country, where an immense traffic is already in existence, and where every year there will be a material increase in it. The port, too, is most accessible for the great grain country of the West, and we will bring here more and more grain all the time, as our facilities are increased."

The output in the Joplin (Mo.) district for the week ended March 10 was 10,891,000 pounds of zinc ore and 1,060,930 pounds of lead ore, valued in all at \$184,058.

During February the value of exports from Mobile, Ala., was \$2,015,604, an increase of \$474,784 over those of January.

FOREIGN TRADE.

This department is designed to set forth opportunities for the extension of the trade abroad of American manufacturers, and to record facts about the rapidly-developing commerce of the South.

FOR EUROPEAN WAREHOUSES.

Suggestions from Belgium for the Extension of American Trade.

In a letter to the Manufacturers' Record Messrs. L. Jansette & Co. of Liege, Belgium, make suggestions regarding the sale of American products in Europe which will interest American manufacturers. They are:

"Competition is becoming so intense in the United States that production will shortly surpass the demand in the United States markets, and American manufacturers feel that it is now urgent for them to look for foreign markets. With this object in view associations have lately been organized in America which devote their entire attention to an increase of the export trade, looking out constantly for enlarging commercial relations with foreign countries, and, in brief, doing everything to put the foreign buyer in touch with the American seller. These associations work admirably, and are certainly destined to render eminent services to the export and import trade. But in spite of their good intentions and all the facilities at their disposal, their efforts are not always crowned with the success they desire. Why? Principally for the following reasons:

"1. American manufacturers generally require, even for a first foreign transaction, cash payment before shipping, or the right to realize upon the bill of lading. These terms are not at all attractive for the foreign trader, who always hesitates to pay in advance for some goods he has never seen and does not know.

"2. American manufacturers are generally prodigal in mailing abroad catalogues and other advertising matter, losing sight of the fact that these means of publicity printed only in English are insufficient on the Continent, where but few persons know the English language.

"3. American manufacturers generally quote their prices for goods taken at factory or f. o. b. New York, without any other information as to shipment, marine freight, insurance, formalities, etc. Then the foreign trader, who in ninety times out of one hundred has not the least acquaintance with details of the import trade, naturally hesitates to place an order in America because he cannot gain a very clear idea of the conditions of sale.

"4. This is one of the most frequent objections. The foreign merchant, as distrustful as he is prudent, would prefer to buy in the first transaction but a small lot to test the matter, as he fears to be deceived. Not 10 per cent. of the foreign traders will undertake import trade on American terms and conditions. The European agent is generally as cautious in entering into negotiations with a foreign producer as he is faithful as a client when the producer has gained his confidence.

"For these reasons it is difficult and slow work to establish trade connections between the American exporter and the foreign trader. However, a very large trade can now be done with Europe, which undoubtedly is now much behind the United States as to manufactured products. It is universally recognized that most of the American manufactured products are now of better make, more practical in use and more advantageous generally than similar ones of European make. English manufacturers have had an immense commercial influence on the

Continent, their export trade amounting yearly to hundreds of millions of dollars, especially in products of superior quality. Everybody knows here that if some one wanted an article of good quality it would be of English make. But during the past few years the English export trade has strongly declined, and is diminishing perceptibly every day because of the entrance into European markets of similar American products equal in quality to English, and at lower prices. In brief, the American products are positively on the way to beat the English ones and destroy their influence in Europe.

"American exporters' immediate purpose now must be to give better facilities to foreign traders for purchasing their goods, either through active European traveling agents or by establishing depots for their goods. However, these means will involve serious inconvenience, as the cost of such traveling agents is very expensive, and commission agents have not always the necessary activity, zeal and energy to assure the sale of goods entrusted to them.

"The best, surest and most economical plan for American exporters would be for associations of a few manufacturers of different articles to unite in establishing a large store and warehouse under the name of Comptoir Americain, where each of the members of the association would have a set of samples of his products. This store should become a permanent exposition of American products in Europe. Among the articles which would be in greatest demand are the following: Metal-working machinery, gas stoves, electric supplies, typewriters, sewing machines, builders' hardware, general hardware, door locks, desks, manufactured fiber, leatheroid, plumbers' supplies, linoleum carpets, gas motors, raw leather, light carriages, etc. This house should be managed by an experienced and capable man, an inhabitant of the country where the house is, and acquainted with both European and American trade. He would book all the orders, even small ones at the start, and assemble them for shipment. The expenses should be met by a pro rata of the amount realized from sales. By this means each of the associated members would have on the European market a permanent representative who would cost him almost nothing, and would thus reach at a minimum cost the maximum of business and the maximum of security. Now, where to establish that Comptoir Americain? Belgium is indisputably the best place. Because—

"1. It is a thoroughly neutral country, on the best terms with all other nations.
"2. It has a first-class seaport, with regular service to the United States.
"3. It is, after England, the leading and commercial country of Europe.
"4. Because of the natural advantages of its situation in the center of Europe, adjacent to France, Germany and Holland, its extensive railway development gives it quick and easy communication with all other nations.

"The writer of this, who is a Belgian, has made several business trips to various parts of the United States, and is now an established exporter and importer in Belgium. He will be pleased to give any information on the subject desired by American manufacturers who will write to him."

Business With Havana.

A party of Louisville merchants have recently been in Havana investigating the opportunities for export trade. They represented wagon-makers, fertilizer manufacturers, provision dealers and others. The general opinion of the vis-

itors was that there is an excellent opportunity to sell boots and shoes, as well as flour, provisions and fertilizer. There is a possibility that a fertilizer factory will be erected in Havana, as it would be more economical to supply the material to the Cuban farmers in this way. The Louisville business men and manufacturers believe they will secure an extensive business as a result of the visit.

The Roumanian Market.

According to a report from the United States consul at Roubaix, France, an excellent opportunity is offered for the introduction of American cotton goods into the Roumanian market. He thinks that as the American goods are made much cheaper than either the French or English materials, it would be well to make the experiment. The principal goods wanted in Roumania are ordinary linen, cretonne, printed or chintz calico and cotton cloth, called "American," which is in great demand by the natives. The trade in these goods amounts to over \$10,000,000 a year.

Coal for Mexico.

A contract for 30,000 tons of coal for the Mexican Central Railroad is now being shipped to the republic by way of Pensacola, Fla. It is stated that this order represents about three months' supply for the railroad company, and that in all probability additional orders will be given on account of the quality of the fuel and the price. This is one of many corporations in Mexico which have hitherto been purchasing Welsh coal, although it had to be transported a distance of about 5,000 miles, or over twice as far as the Southern material.

Galveston Exports.

The exports from Galveston for the six months ending February 1 included 1,159,000 bales of cotton, 15,102,000 bushels of grain, 91,000 barrels of flour, 131,000 tons of cottonseed products, in addition to about 80,000 barrels of cottonseed oil. Of the exports, 31,000 bales of cotton were sent to Japan, while nearly all of the cottonseed oil was shipped to France and Holland.

Texas Oil for Export.

According to a dispatch from Galveston, Texas, there is a possibility that oil from the wells in the Corsicana district may be exported in tank steamships. J. S. Sullivan of Corsicana, who is extensively interested in oil operations in Eastern Texas, is reported to be making arrangements to ship the oil in cars to Galveston, where it will be transferred to vessels.

Seeking Information.

Messrs. A. Schoenfeld & Co. of Glasgow, Scotland, write to the Manufacturers' Record seeking to learn the names of the chief American makers of bolts and nuts, tube strips, steel beams, channels, tees, plates and sheets.

Jottings at the Ports.

A dispatch from Norfolk, Va., is to the effect that the steamship *Habil* will be the first of the new line to run between Norfolk and the West Indies, incorporated by the Norfolk & West Indian Fruit & Steamship Co.

The steamship *Algiers* has been placed on the route between New Orleans and Havana. The vessel has been running between New York and New Orleans, but it is understood will be in the Cuban trade permanently in the future.

RAILROADS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

IMPORTANT FLORIDA ENTERPRISE

Elaborate Plans of the Drew Lumber Co.—To Build an 80-Mile Railroad.

The extent of railroad construction in Florida during the past two years has been very noticeable. The present year promises to equal its predecessors in the new mileage. Much of it is being constructed by a comparatively few companies, who are developing short lines intended for local business into railways with tidewater terminals and ranging fifty miles and over in length.

The Atlantic, Valdosta & Western Railroad represents 155 miles of new line, over 100 miles of which are in Georgia. The Jacksonville & Southwestern has fifty-four miles in operation between Jacksonville and Lake Butler, and is now completing about thirty miles additional. Both of these projects have been recently referred to in the Manufacturers' Record. The Drew Lumber Co. is interested in the Suwannee & San Pedro Railroad, which is projected from Live Oak, Fla., through Western Florida to Stephenville, on the Gulf of Mexico. A branch will also be built from the main line to Perry, in Taylor county. The entire length of this road will be about eighty miles. In a letter to the Manufacturers' Record Mr. George L. Drew of Columbia, Fla., president of the company, writes as follows:

"At present the road will be built from Suwannee river southwest, passing through Mayo to Steinhatchie, where a very large turpentine and naval-stores plant is located. The S. & S. P. R. R. Co. has closed contracts to haul the naval stores from this and other naval-stores plants, as well as contracts covering the products from a very large area of timber lands in both Lafayette and Taylor counties.

"The S. & S. P. R. R. Co. estimates that the timber and naval stores within a distance of ten miles of its line will aggregate 1,250,000,000 feet and 1,200,000 packages of naval stores. Besides the timber and naval stores, there is a very extensive area of phosphate land in the Steinhatchie section, which has been examined and found of good quality and satisfactory depth. The road will run through this phosphate area, and none of it will be further than six miles from its line.

"Lafayette and Taylor counties, though chiefly valuable for large unbroken forests of yellow-pine timber and hardwoods, as well as the large phosphate deposits, still are capable of extensive development in an agricultural way, the land being especially adapted to growing early vegetables for Northern markets, and the soil of but few counties in the State is so well suited to the growth of sugar-cane and corn. Stock-raising is one of the chief industries at present, and a large number of cattle that are being shipped from Florida to the Cuban markets come from these two counties. Hog-raising is largely and successfully carried on.

"The company will put in a drawbridge across the Suwannee river at a point where the Drew Lumber Co. will put in a large saw-mill plant. Their town will be known as Wilmarth, located in Suwannee county, and in addition to the saw-mill and planing-mill plant here, which it is estimated will have an annual output of more than 20,000,000 feet of lumber, will be located the S. & S. P. R. R. shops and foundry. The Drew Lumber Co. will establish other enterprises at Wilmarth.

and along the line of the S. & S. P. R. R. the company will encourage the development of the country.

"The development of this large section has been retarded by the abundance of timber in more accessible sections, but with the end of yellow pine in sight the large resources of timber, including naval stores and extensive phosphate deposits, have demanded transportation facilities, which the S. & S. P. R. R. will furnish.

"The Drew Lumber Co., in addition to having a contract with the S. & S. P. R. R. to do the grading, has a contract to furnish the road with an additional locomotive, cars and other equipment. It will build the freight cars at its plant at Columbia, Fla., and wishes prices on car castings, axles, etc."

This is a very clear explanation of the reason for constructing such an important line, although it involves an outlay of nearly, if not quite, \$1,000,000. The resources of the part of the State through which the road will be built are considered so extensive and valuable that the promoters feel justified in making such an investment. The Suwannee & San Pedro will connect with the Florida Central & Peninsular and Plant systems at Live Oak, while its tidewater terminus will be on Dead Man's bay, considered one of the principal harbors on the west coast.

"Railways Reaping the Benefits."

A leading official of one of the railways in the South is thus quoted: "The rise in cotton is creating one of the greatest transformations in the South that has ever been witnessed there. Every bale of cotton of previous crops held in the warehouse has come to market, while the present crop and the immediate future crop are being sold at most advantageous prices. The money for this cotton has gone directly to the planter. The result is a distribution of wealth to those who fairly deserve it. The immediate effect is seen in more liberal expenditures by planters for supplies. This money is in turn swelling the fortunes of tradesmen. In addition, the development of the steel industry at Birmingham is giving that section of country a veritable boom, which is also reflecting upon conditions in all other parts of the South. The railways are coming in for their share of the prosperity; not one of them is being left behind. Louisville & Nashville and the Southern Railway are, of course, reaping the greatest benefits. These properties have been put into excellent physical condition, and the improvement in earnings is giving the managers opportunity to perfect many plans for improvement which have been held in abeyance pending just such developments as are now taking place."

To Be Built at Once.

The engineers in charge of the branch of the West Virginia Central & Pittsburgh Railway, to be built from Elkins to the Greenbrier division of the Chesapeake & Ohio, now under construction, announce that bids will be received until April 15 next for the grading and mason work of this line. As already stated in the Manufacturers' Record, it is to be forty-three miles in length. The contracts for two tunnels have already been let. John W. Moore at Elkins is engineer in charge, and C. H. Latrobe at Baltimore, consulting engineer.

Death of Charles H. Coster.

The announcement is made of the death of Charles H. Coster of the firm of J. Pierpont Morgan & Co. of New York. Mr. Coster had been intimately associated with railways in the South, and was especially prominent in the reorganiza-

tion of the Richmond Terminal into the Southern system. It is stated that the financial plan, which has since been carried out so successfully, was conceived principally by him. Mr. Coster had a wide reputation as a railroad financier of great ability. He was a director in a large number of corporations in the South, including several companies incorporated in the Southern, the Chesapeake & Ohio, also the Georgia Southern & Florida.

Industries Along Illinois Central.

Mr. George C. Power, industrial commissioner of the Illinois Central, who has recently been visiting towns along the Southern division, states that during the last few months a number of woodenware factories have been located in Mississippi, in addition to textile industries. He states that there is such a demand for textile machinery that the construction of cotton mills has been somewhat retarded, and that some companies who gave orders a year ago have not had them filled as yet. According to Mr. Power, the additional plants along the Illinois Central have attracted many skilled laborers, who are immigrating to the South to find work in them.

Florida East Coast Branch.

The Florida East Coast Railway Co. has completed its improvements to its branch to Pablo Beach, near Jacksonville, and trains are now in operation over it. The road has been laid with 60-pound steel rails. It is understood that the present line, which is seventeen miles long, will probably be extended to Mayport, making its total length thirty miles. It is understood that the railway company will build another hotel on the branch between Mayport and Neptune. At Mayport wharves are being built, each of which is 100 feet wide and 1000 feet in length.

A Possible Extension.

A dispatch from Columbia, S. C., states that the Southern Railway Co. is completing surveys for a line between Allendale and Hardeeville. The distance is about sixty miles, and would form a link in the Southern's route between New York and Florida, considerably shortening it. At present the Southern's trains reach Savannah by way of the Port Royal & Augusta Railroad between Allendale and Yemassee, thence by the Plant system. By means of the new line it is calculated that the distance will be shortened twenty-five miles.

Increased Its Capital.

A dispatch from Charleston, S. C., states that the Seaboard Investment Co., which, it is understood, will control the terminals of the Seaboard Air Line in that city, has decided to increase its capital stock from \$30,000 to \$500,000. It is understood that this is for the purpose of building the proposed terminals to be used in connection with the Chattanooga, Augusta & Charleston Air Line Railroad, which will be the Charleston extension of the Seaboard Air Line.

West Virginia to Tidewater.

The latest report concerning the Richmond & Tidewater Railroad is to the effect that the Standard Oil Co. is interested in the plan, and that it will extend from the West Virginia coal and ore territory across the State of Virginia to a deep-water terminus on Chesapeake bay at Gloucester Point. In connection with the report it is stated that the road will be utilized for transporting coal and oil in large quantities for transfer to vessels at Gloucester Point.

Another Florida Line.

The Gulf Lumber Co., recently incorporated in Florida, it is understood will, in addition to its timber operations, construct a railway line to be operated in connection with a steamboat service on the navigable waters of Western Florida. R. G. Knight is president of the company, and Walter Ray, vice-president.

Railroad Notes.

The Birmingham Electric & Railway Co. has recently secured thirty new cars for use on its lines.

The Fort Worth & Denver City Railway Co., it is stated, has determined to purchase four new locomotives, also several passenger cars.

The International Association of Ticket Agents at its recent meeting at Atlanta elected J. F. Goodhue of Beaumont, Texas, as third vice-president.

Arrangements have been made for another steamer line between Baltimore and points on the Miles river. D. S. Brockway, who has a line of boats on the Choptank river, has arranged the new service.

The Louisville & Nashville Railroad Co. recently transported a solid trainload of bananas from Mobile to the Northern market. This is an indication of the growing importance of the fruit business at Mobile.

At the annual meeting of the Gulf, Colorado & Santa Fe Railway Co. the present officers were re-elected. Aldace F. Walker of New York is chairman of the board of directors, and E. P. Ripley of Chicago, president.

About 10,000 tons of coal have recently been loaded on barges at Greenville, Miss., to fill orders from New Orleans. The prospects are that the demand in the near future will be extremely heavy. The coal comes from the mines in Walker county, Alabama.

A train on the Norfolk & Western Railway made the run between Richmond and Norfolk recently at the rate of fifty-two miles an hour, including ten stops. The total distance is 104 miles. This indicates the excellent condition of the roadbed, as well as the power of the locomotives in service on this line.

Current History, edited by Dr. A. S. Johnson, for the fourth quarter of 1899, completes its contemporaneous record of the history of the last ten years. The past year has been particularly full of stirring incidents, and in the current number of the quarterly are discussed the colonial problem of the United States, the "open door" and other issues of the Far East, the political relations of European powers, currency reform, reciprocity, United States politics, the work of Congress, the South African war, the isthmian canal, the business situation, Canadian affairs, and the progress of science, invention, art, education, music, drama, literature and religion.

The "Standard Guide" to Mexico City and vicinity is a book to fill a want that the outpouring of English-speaking tourists in Mexico in recent years has made very pressing. Its compiler has gathered from the best sources all the information regarding the picturesque old capital that travelers in Mexico require. Readers of the "Standard Guide" will know just what to see and when best to see it. The book contains more than 100 fine illustrations of Mexico City, and in addition to its practical value forms an admirable souvenir from Aztec-land. Publisher, Modern Mexico Publishing Co., St. Louis, Mo. Price fifty cents.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

Correspondence relating to textile matters, especially to the cotton-mill interests of the South, and items of news about new mills or enlargements, special contracts for goods, market conditions, etc., are invited by the Manufacturers' Record. We shall be glad to have such matter at all times, and also to have any general discussion relating to cotton matters.

The American Loom Co.

This company, organized under the laws of the State of New Jersey, is to take over the patents and business of the Universal Loom Co., and also all the property of the Reidville Machine Works at Reidville, Mass. The new company will own all the patents of H. I. Harriman for the new automatic shuttle-changing looms now being built by the Reidville Machine Works, and with the new capitalization will be equipped with an ample cash working capital to meet the demands of the business, which is developing very rapidly.

The new loom built by this company by a very simple device which is applicable to any modern plain loom, automatically replenishes the filling, thus enabling a weaver to handle with ease twice as many of the looms so equipped as of plain looms. When the filling is exhausted the loom stops as in the ordinary plain loom, the old shuttle is instantly ejected, a new shuttle is inserted and the loom automatically restarted without the presence or assistance of the weaver, the new shuttles being supplied from a magazine (a magazine holding eight shuttles), which has simply to be kept filled. By this means the high weaving speeds of the latest and best plain looms are obtained, and yet the looms and shuttles are not subject to the shock of change at high speed.

The looms have also a practicable warp stop motion, a new thread-cutting device and a hand-threading shuttle.

While the company builds its own looms complete, with all its new and attractive features, it is also prepared to refit plain looms of modern design now running in the mills. Looms thus refitted will have entirely new running parts, as well as the automatic shuttle-changing and warp-stop mechanisms, and will be practically new looms, while the regular loom supplies, such as shuttles, harnesses, reeds, etc., can be used if desired.

The advantages of the Harriman loom are high weaving speed with low magazine speed, simplicity and strength of construction, cheapness of supplies and fine quality of cloth. Orders are already in hand from several of the principal mills in New England, as also some of the Southern mills.

The officers of the company are John E. Searles of 27 William street, New York, president; William C. Lovering of Taunton, Mass., vice-president; H. I. Harriman, secretary, and J. Foster Searles, treasurer. The office and works are at Reidville, Mass.

New England Manufacturers.

The board of government of the New England Cotton Manufacturers' Association has elected Mr. D. M. Thompson of Providence, R. I., to fill the office of president rendered vacant by the death of Mr. Frederick E. Clarke. Mr. Thompson is widely known, and has a very large personal acquaintance among manufacturers in the North and South, largely derived from his broad practice in mill engineering for a number of years. His early

training in connection with the manufacture of cotton goods was followed by experience in engineering and architecture, which comprised not only a knowledge of methods in this country, but a very close study of European practice obtained during several trips to Europe. He gave up his large practice as a mill engineer in 1863 to take up the position of general superintendent of the mills of Messrs. B. B. & R. Knight, with whom he remained until January, 1895, when he resigned to take the management as president and treasurer of the Corliss Steam Engine Co., which has recently been sold to other interests, and Mr. Thompson returned to his former position and resumed the general management of the mills and works of Messrs. B. B. & R. Knight.

A \$600,000 Mill for Aiken, S. C.

Another large mill will be located near Aiken, S. C. This will be a \$600,000 plant, and it is announced by Messrs. Charles Warren Davis & Co. of Augusta, Ga. Application for charter has been made under the name of the Croft Manufacturing Co., and the capital stock is placed nominally at \$250,000, with privilege of increase. The incorporators are Messrs. Charles Warren Davis of Augusta, Ga.; Arthur S. Wattles of Canton Junction, Mass.; Benjamin W. Tingley of Philadelphia, Pa.; T. G. Croft and G. W. Croft of Aiken, S. C. A large tract of land has been purchased as site, located near Aiken, S. C., where the company will build a plant of 25,000 spindles and looms to match (probably 750) for the production of print cloths. A mill of this equipment usually costs close to \$600,000. Philadelphia and Eastern capital will be interested largely in this enterprise. Builders of cotton machinery and others desiring to correspond concerning this project should address Messrs. Davis at No. 5 Library Building, Augusta, Ga.

A \$400,000 Mill for Columbus, Ga.

The Bibb Manufacturing Co. of Macon, Ga., is about to add another extensive cotton-manufacturing enterprise to its several mills now in operation throughout Georgia. This company has acquired a controlling interest in the Columbus Power Co. by the purchase of the latter company's recent issue of additional stock, amounting to \$100,000. The power company is developing 8000 horse-power at its water-power plant near Columbus, Ga., and this power is to be used by the Bibb Company for operating the new mill. The new mill will be located near Columbus, on a site which has been purchased for \$15,000. The mill will have 20,000 spindles and looms in proportion (probably 600) for the production of high-grade goods. Eighty tenements will be built for operatives. Such a mill will cost about \$500,000. The Bibb Manufacturing Co. has a capital of \$1,800,000 employed in its various mills.

Corsicana Cotton Interests.

[Special Cor. Manufacturers' Record.]
Corsicana, Texas, March 8.

The Corsicana Cotton Factory Co. has been organized by the election of the following directors: Hon. Geo. T. Jester, Dr. S. W. Johnson, J. W. Edens, John Miller, T. D. De Annon, J. E. Whiteside, J. B. Haynie, Chas. H. De Lafosse, E. W. Caldwell, H. L. Scales, J. S. Cullinan and Capt. Charles H. Allyn of Corsicana, and John Taylor of Toronto, Canada. The capital stock has been subscribed to build a \$100,000 plant.

Manager H. L. Scales of the Corsicana Cotton Oil Co. says that he will build here a twenty-eight 70-saw gin plant, to

be the largest plant of the kind in the world.

A company has been organized, with a \$50,000 paid-up capital, to build here a 60-ton capacity cottonseed-oil mill. Capt. Charles H. Allyn will be the president, and Mr. R. H. Hamilton will be the manager.

A \$500,000 Addition.

The stockholders of the F. W. Poe Manufacturing Co. of Greenville, S. C., met during the week and decided upon an addition to their plant which will involve the expenditure of nearly \$500,000. This addition will consist of a duplication of the present mill, which contains an equipment of 25,088 spindles, 752 looms and complementary apparatus. A modern mill structure four stories high will be built of brick to accommodate the new machinery. The company's capital stock will be increased from \$250,000 to \$500,000 to assist in providing the funds necessary for the extensive improvement. F. W. Poe is the company's president.

A Lowell Opinion.

In its quarterly review of employment and earnings the labor bureau of Massachusetts, referring to Lowell, says:

"In the cotton industry the past year has been especially prosperous as compared with a number of previous years. In some mills all departments are running overtime continuously to keep up with the demand, while in others the spinning departments have run periodically during the fall and winter up to 9 or 10 o'clock, and a continuance of the present favorable conditions is expected. Some of the corporations are building mills in the South, which are expected to help tide over years of depression."

A \$20,000 Knitting Mill.

The Tillman Manufacturing Co. will build a \$20,000 knitting mill at Valdosta, Ga., and probably enlarge greatly after operations are begun. The company has applied for charter, its capital stock being \$20,000, with privilege of increase to \$100,000. The incorporators are Messrs. H. Y. Tillman, T. S. McKey, H. F. Tillman, A. J. Strickland, J. B. Varn, J. M. Harvey, E. W. Lane, J. P. Coffee, B. F. Strickland, W. B. Johnson, B. W. Bentley, T. M. Ray, R. A. Peoples, J. M. Briggs, J. W. West and D. A. Denmark. The plant will include a building 70x200 feet in size, equipped for the production of hosiery, knit underwear, etc.

Northern Parties to Invest.

The Cheraw Cotton Mills of Cheraw, S. C., was incorporated recently, with capital stock of \$100,000. During the past week Northern parties have become interested in the project, and will invest \$100,000 in it, thus making the capital to be invested \$200,000, and possibly it may be increased further. The company has obtained options on a most suitable tract of land near Cheraw. The land includes 1000 acres of well-timbered property and a water-power that it is proposed to develop for operating the plant. J. C. Hervis, Drexel Building, Philadelphia, Pa., can be addressed.

Atlanta's \$100,000 Yarn Mill.

It was recently reported that S. A. Carter of Atlanta, Ga., had decided upon the erection of a cotton factory to cost about \$100,000. This announcement is now confirmed by Mr. Carter, and he states further that the Piedmont Manufacturing Co. will be incorporated to own and operate the plant. It will be a 5000-spindle hosiery-yarn mill, probably to be increased later on. Mr. Carter will be president of the company. His associates are

Messrs. W. S. Elkin, Frank Hawkins and J. Carroll Payne.

The Cotton Movement.

According to the report of Col. Henry G. Hester, secretary of the New Orleans Cotton Exchange, for March 9, the amount of cotton brought into sight during the 190 days of the season was 7,882,490 bales, a decrease under the same period last year of 1,731,543 bales; exports were 4,239,395 bales, a decrease of 1,735,139 bales; takings by Northern spinners 1,985,448 bales, an increase of 144,147 bales; by Southern spinners 924,230 bales, an increase of 83,960 bales.

A \$100,000 Mill for Goldsboro, N. C.

The Borden Manufacturing Co. has been organized for the erection of a hosiery-yarn mill at Goldsboro, N. C. The capital stock is \$100,000, and fully that amount and possibly more will be invested in the contemplated plant. The latter is to include a main structure of brick, 75x275 feet in size, in which 6000 spindles will be placed. Contracts for buildings and machinery will be awarded at once. Site has been chosen. Frank K. Borden is secretary-treasurer.

The Easley (S. C.) Cotton Mills.

Last week notice was made of the incorporation of the Easley Cotton Mills of Easley, S. C., with capital stock of \$200,000. It was stated the company would "arrange to build factory;" in fact, the company already has its mill in course of construction, and expects to have 10,000 spindles running before the summer ends. The mill was reported fully last fall. J. M. Geer is president of this enterprise.

Textile Notes.

The Commercial Club of New Decatur, Ala., is considering a proposition for the erection of a \$50,000 cotton-yarn mill.

The Anniston (Ala.) Carpet Co. is about to order more looms for its mill. Seven looms have been contracted for.

L. L. Strause of Henderson, N. C., will organize a company for the establishment of a \$50,000 knitting manufactory.

G. B. Johnston of Box 31, Canton, Ga., is mentioned in connection with a proposed cotton-rope mill, and is desirous of obtaining prices on the machinery required.

M. A. Henderson of Rutherfordton, N. C., is mentioned in connection with a proposed hosiery mill, and is desirous of obtaining estimates on cost of machinery required.

The old Chattahoochee Knitting Mill's building at Girard, Ala., across the river from Columbus, Ga., will be overhauled and re-equipped by local parties for resuming operations as a knitting plant.

C. J. Deal of China Grove, N. C., is making progress with his proposed company, lately noted as contemplating a 7500-spindle mill. A capital stock of \$125,000 is proposed, and is rapidly being subscribed.

W. R. Richey and associates of Laurens, S. C., propose the development of Ware shoals and the transmission of the power electrically to operate manufacturing industries, including a cotton mill which they will erect.

Efforts are being made to locate a cotton mill at Pittsburg, Texas, and the First National Bank of that town is interested. About \$60,000 is subscribed, and it is desired that a practical man invest \$40,000 and manage the plant.

A company has been organized to build a knitting mill at Williamsburg, Va. L. W. Lane, Jr., is president; Hugh S. Bird, vice-president, and C. P. Armistead, R.

L. Spencer, H. N. Phillips, J. P. Barkley of Williamsburg and G. D. Andrews of New York are directors.

Messrs. J. N. Griffin, J. L. Staten, J. F. Lewis, C. W. Lamar, W. H. Griffin and others of Valdosta, Ga., will organize a \$100,000 stock company to build a 5000-spindle mill for the production of hosiery yarns. A building 75x300 feet, two stories high, will be erected.

The Moultrie Cotton Mills has been organized, with capital stock of \$100,000, to build cotton factory at Moultrie, Ga. Work on the plant is to be commenced within thirty days. Messrs. W. C. Vereen and W. W. Ashburn are the committee to purchase the machinery.

W. V. McFadden of Covington, Tenn., confirms the report that he is about to build a cotton mill. The plant will have, as has been stated before, an equipment of 5000 spindles and necessary complement. Such a plant costs about \$100,000. All the machinery required has been bought.

Application has been made for a charter for the Woodruff Cotton Mill Co., to have capital stock of \$250,000, and the purpose of building a cotton factory at Woodruff, S. C. The leading parties interested are Lewis W. Parker of Greenville, S. C.; A. W. Smith of Abbeville, S. C., and Ellison A. Smyth of Pelzer, S. C.

The proposed Tifton (Ga.) Cotton Mills has effected a permanent organization, with H. H. Tift, president; W. S. Witham, secretary, and L. G. Maynard, treasurer. The capital stock is \$60,000, with privilege of increase to \$500,000. The company proposes to build a 4000-spindle plant; may also put in 125 looms.

F. O. Schuyler of Macon, Ga., has completed arrangements for the location of the knitting mill lately mentioned. The Schofield Manufacturing Co. has been chartered for the purpose, with capital stock of \$25,000, and privilege of increasing to \$200,000. A plant for the production of cotton yarns and cloth, knit goods, underwear, etc., will be built.

The \$100,000 cotton mill mentioned some months ago as projected for Harri-man, Tenn., is now announced definitely. The projectors are Messrs. W. B. Andrew, A. M. Crinkley and Jas. A. Crinkley. They have purchased established buildings suitable for their purpose, and will at once convert them into a cotton factory. Further details will be stated later.

The Eufaula (Ala.) Cotton Mills will make improvements, including the erection of an engine-room 28x50 feet, in which to place two engines of 400 horsepower each. New machinery will be installed to include 1040 spindles and thirty-two looms, which will give the plant a total of 11,503 spindles and 363 looms. The improvements will cost about \$25,000.

The Tifton (Ga.) Cotton Mills has been organized, with capital stock of \$60,000, and privilege of increase to \$500,000. The company expects to put in 4000 spindles at the start, and later 125 looms. H. H. Tift is president; L. G. Manard, secretary-treasurer; directors, Messrs. H. H. Tift, L. G. Manard, E. P. Bowen and C. W. Fullwood of Tifton, and W. S. Witham of Atlanta.

Messrs. J. C. Atkin and associates of Wilkesbarre, Pa. (where they have textile factories), have purchased a controlling interest in the American Cotton Spinning Co. of Denison, Texas. This latter company is the one that has remodeled, improved and equipped the old Denison Cotton Mill, as stated last week. The mill is running 15,300 spindles, and expects to gradually increase to 50,000.

The Yazoo Cotton Mills of Yazoo City, Miss., incorporated last November, formally organized during the week by the election of officers. J. M. Barnwell was chosen president, and L. C. Montgomery, secretary; directors are Messrs. W. H. Kline, William Warmack, R. L. Bennett, H. Wise, E. Schaffer, C. H. Williams, I. C. Hollingsworth and the two officers noted. Arrangements for erecting factory will be made immediately.

J. T. Woodside of Greenville, S. C., has made a proposition to the citizens of Gainesville, Ga., for the location of a \$200,000 cotton factory. Mr. Woodside offers to invest \$100,000 if the citizens will subscribe the other \$100,000 necessary to build a mill. Doubtless the terms of the offer will be promptly accepted. Mayor Mitchell and Z. T. Castleberry of Gainesville are both pushing the project. The company will probably take the name of Woodside Cotton Mill.

A \$75,000 stock company has been formed at Millen, Ga., to build a cotton factory. The directors are Messrs. J. H. Daniel, Sr., J. P. Applewhite, H. W. Parker, J. H. Hillsman and S. W. Palmer of Millen, L. H. Hilton of Sylvania, W. M. Durden and G. O. Wornock of Waynesboro and W. S. Witham of Atlanta, all in the State of Georgia. A site has been selected for plant, and contracts for machinery and buildings will soon be placed. Equipment of plant not definitely decided yet.

The Harriet Cotton Mills of Henderson, N. C., lately reported at some length as organized, etc., has commenced work on its proposed 10,000-spindle and 200-loom plant. Site has been obtained and contract awarded to Robert Bunn for the erection of the necessary buildings, including a main structure 79x240 feet and engine and boiler room 42x53 feet. There will also be twenty-five tenements for the operatives. Brick for the buildings will be made on the land used for site. D. Y. Cooper is president.

A cotton-factory company will be organized at once at Itasca, Texas, the sum of \$100,000 having been subscribed for the purpose. Officers have been elected and charter will be applied for at once, after which arrangements will be made as to erection and equipment of plant. The directors are W. H. Webb, F. M. Files, Jno. R. Griffin, E. E. Griffin, J. M. Coffin, J. H. Roper and Ed Woodall. Mr. Webb is president; Mr. Files, vice-president; M. S. Wood, secretary-attorney, and Jno. R. Griffin, treasurer. A committee will be sent to the cotton-mill districts to investigate the industry before any contracts are let.

The three large cotton mills in Georgia being promoted by Mr. J. S. James of Douglasville are to be pushed as rapidly as possible to completion. The New Century Cotton Mills, located at Douglasville, Ga., will have its buildings completed by May 1, and an equipment of 20,000 spindles and 600 looms is to be installed in them. This will make the plant cost about \$500,000. The Austell Cotton Mills, to be located at Lithia Springs, will be commenced next month, and this plant will have 10,000 spindles and other necessary complement. After the Austell plant is under way the 10,000-spindle mill (not yet named) will be commenced at Sweet Water Creek. The two last-mentioned mills will cost about \$200,000 each. Estimates on all the machinery will be wanted.

The Houston Manufacturers' Association has elected H. C. Mosehart, president; H. W. Lottman, vice-president; F. M. Gray, secretary, and E. M. Burke, treasurer.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

Cottonseed-Oil Notes.

The Georgia Cotton Oil Co. of Columbus, Ga., has purchased property in that city, and it is said will build a factory and altogether spend about \$10,000 for improvements.

The Summit Cottonseed Oil Mill at Summit, Miss., started upon the 6th inst., and will continue to run night and day for the next six months. The output of oil, meal, hulls and linters has proven highly satisfactory, being of superior quality.

It is stated that O. N. Julian of the firm of Henderson & Julian, owners of the round-bale cotton gin at Tusculum, Ala., is negotiating for machinery for a cotton-oil mill at that place. Mr. Julian hopes to have the plant in course of erection in a few months, and in successful operation by the fall season.

A new cottonseed-oil-mill company was organized last week at Corsicana, Texas, with a capital stock of \$50,000, all paid up. C. H. Allyn is president of the company, and R. L. Hamilton of Ennis is general manager. Ground has been purchased for the location of the mill, and work will be commenced at once.

It is stated that a new cottonseed-oil mill with a capacity of 100 tons of seed a day is to be erected in Kansas City, Mo. Mr. David Boaz, a dealer in land and live-stock, is the promoter, and will organize a company with a liberal capital. The milling plant will cost \$100,000, and the money for the construction has been subscribed and an option secured on a site. The plant will commence operations in the early autumn.

The market for cottonseed products in Texas is about steady. Cottonseed oil was easier last week, but closed on the 11th steady at 29 to 29½ cents for crude loose and 32½ to 33 cents for prime summer yellow; linters, 4¼ cents per pound, all f. o. b. mill at interior point; hulls, sacked and baled, \$4 to \$4.50 per ton; prime cottonseed meal, \$22.25 to \$22.50, and cottonseed cake, \$22 to \$22.25 per ton delivered at Galveston. Houston mills are paying \$13 per ton for cottonseed f. o. b. interior towns in the State.

Cottonseed products in New Orleans have ruled slightly easier, with some disposition to sell oil, for which prices closed about steady. Cake and meal ruled firm, with a good inquiry for export. Shipments of crude oil last week amounted to 109,500 gallons, all to an Austrian port. Receivers' prices ranged as follows: Cottonseed, nominal per ton of 2000 pounds delivered here for good, sound seed, including sacks; cottonseed meal jobbing per carload at depot, \$21.50 per short ton of 2000 pounds; for export per long ton of 2240 pounds f. o. b., \$23.75; oilcake for export, \$23.75 per long ton f. o. b.; crude cottonseed oil at wholesale or for shipment, 31 cents per gallon loose f. o. b. tanks here; in barrels, 33½ cents; cottonseed hulls delivered per 100 pounds, according to location of mill, 20 cents; linters, according to style and staple—A, 3¼ to 4½ cents; B, 2½ to 3 cents; C, 2 to 2½ cents.

A strike occurred last week among the logmen in the Ferry Pass region, a few miles from Pensacola, Fla., and as a result thereof all the timber intended for export through that port is tied up pending a settlement of the trouble.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., March 14.

The approach of spring is having a favorable effect upon the local lumber market, which has been rather quiet during the past fortnight. There has been a much better volume of business reported during the past week, and prices are generally steady for desirable stuff. Yardmen are not purchasing heavily, but are taking only as the occasion requires. There has been a good inquiry from box-makers, who are all busy at this period of the season. In North Carolina pine the market continues firm, and the demand from the North and East, which has been a little slow this month, is now opening up. Local manufacturers look forward to a fair spring and summer trade, and at the moment orders are beginning to arrive, mostly for prompt delivery. Several cargo lots of North Carolina pine have been sold this week at list figures. In hardwoods business continues to show considerable activity, and out-of-town buyers have been in the market buying freely the past week. Stocks of dry lumber are light at all milling points.

Norfolk.

[From our own Correspondent.]

Norfolk, Va., March 11.

Among the many avenues of commerce and industry at this port, that of wood products is contributing largely to the extension of its interests. Both here and at outlying milling sections of Virginia and North Carolina the lumber industry is more than holding its own. Timber lands are being rapidly absorbed by the various corporations engaged in the manufacture of lumber, and milling plants of the most complete equipment are being constructed at convenient points for quick shipment. The demand for all classes of lumber, instead of diminishing, is now quite as pronounced as at any time during the past year, and from the numerous schedules in circulation the spring trade is likely to open with greater activity than for some time past. Orders for prompt delivery are numerous, and the mills generally have not the stocks likely to be required to meet an immediate execution. At very few milling points there is but little accumulation of stock, and in many cases there is a great scarcity of certain grades and dimensions. The North Carolina Pine Association at its last meeting reported the list of values firm and advancing, and in many cases certain grades were done at figures above list prices. The inquiry from foreign sources is also claiming the attention of manufacturers, and it is thought that with stocks in their present condition the effort to supply both the home and foreign demand will be somewhat straining on the manufacturer. Planing mills everywhere are busy, and dressed lumber is being shipped in considerable volume. The supply of cars for rail shipment is somewhat limited, and vessels of desirable tonnage scarce. A number of vessels under charter are due to arrive for loading, and rates are very steady at \$3 to \$3.50 to New York and Sound ports, and \$4 to Boston.

Charleston.

[From our own Correspondent.]

Charleston, S. C., March 11.

The movement in wood products so far this month from this section has been of a fairly active character. A steady de-

mand from the usual sources prevails, and mills, both here and at Georgetown and at adjacent points, are all rushed with orders. Prices for all desirable lots of lumber are well maintained, and both yellow pine and cypress are showing a very firm tone in all grades and dimensions. During the past week the schooner Margaret B. Roper cleared for New York with 317,000 feet of lumber, and the steamship Carib for Boston with 4468 crossties and 77,325 feet of lumber among her cargo. Several vessels are due to arrive to load cargoes this week, and during the month shipments are expected to be much heavier. At Georgetown all the mills are very busy, and the movement among millmen during the present month bids fair to be among the heaviest of the winter season. Freight on lumber are generally steady, with vessels offering very sparingly.

Savannah.

[From our own Correspondent.]

Savannah, Ga., March 11.

The week under review has shown a steady movement in wood products at this and nearby ports in Georgia. The general tone of the lumber market is firm, with prices well maintained. Reports from all milling sections on railroads terminating here are generally of an encouraging character, and business at interior points, as well as at coastwise ports, is showing considerable activity. At Brunswick the shipments continue to improve, and for the current month will show a very heavy business. A feature of the trade at Brunswick is the shipments of crossties, this industry having grown to enormous proportions during the past decade. During the months of January and February of this year the largest shipments of crossties in Brunswick's history were made. During January there was shipped 264,700 ties, and during February 242,183, a total of 506,883. At Darien receipts of lumber and timber have been very heavy so far this month, and a good domestic and foreign business has been developed. During the past week Savannah has shipped nearly 4,000,000 feet of lumber and crossties, and if vessels were more easily obtained much larger shipments would be made. Rates on vessels for carrying lumber continue very steady, with \$7.25 and \$7.50 from Brunswick, and \$7 from this port to New York.

Mobile.

[From our own Correspondent.]

Mobile, Ala., March 11.

The timber and lumber trade of this port continues to show a more than average volume of business, and the showing recorded last week indicates an active market in nearly every avenue of the industry. At a meeting of the Gulf Coast Lumbermen's Export Bureau of Information the general opinion advanced by members of the bureau was that the lumber business of the Gulf coast was in a very healthy condition. Prices, however, were not advanced, but are well maintained, and decidedly firm at list figures. Labor conditions here in lumber and timber circles are in better shape than they have been during past ninety days. A feature of the lumber trade is the decided demand from Cuba, which has been on the increase since the close of the Spanish-American war. The market at the moment is quite active in Cuban shipments, no less than 3,500,000 feet of lumber having been shipped during the past ten days. There is also a good inquiry from South American ports. The bark Mersey cleared last week for Rosario, A. R., with 670,000 feet of lumber and the bark Bayard for Rio de Janeiro with 967,000 feet. The bark St. Monon cleared for Port Natal, South

Africa, with 1,044,147 feet of lumber, and the bark Lief for the same port with 43,835 feet. The timber trade, while not of great volume, is in fair shape, and values continue very steady. Sawn timber is quoted at 15 to 15½ cents per cubic foot, 40-foot basis, with contracts at 15 cents. Hewn timber is quoted at 14 to 15½ cents per cubic foot, hewn oak 15 to 18 cents, and hewn poplar is in good demand at 12 to 13 cents per cubic foot. Oak logs are quoted at \$8 to \$12 per 1600 superficial feet, poplar logs at \$8 and pine saw logs at \$7 to \$10 per 1000 superficial feet. Lumber and timber freights are firm, with a moderate offering of vessels. Last charters were schooner Mabel Hooper from Ship Island to Havana with lumber at \$5.50; a British steamer, 959 tons, from Pensacola to Bilbao or Santander with timber at 125/, and steamer Heathfield, 1371 tons, from the Gulf to Houlleur with timber at 117/6, April.

Lumber Notes.

Over 4,000,000 feet of logs reached Chattanooga, Tenn., last week from the headwaters and tributaries of the Tennessee river.

The receipts of lumber at the port of New Orleans for the week ending March 9 amounted to 1,642,557 feet, and for the season 57,967,274 feet, against 51,162,700 feet last season.

The shipments of crossties from the port of Brunswick, Ga., for the months of January and February, 1900, were the largest in the history of the industry at that port, aggregating 506,883.

The Dudley Lumber Co. of Hickory, N. C., last week purchased from J. H. Hamilton of Dehi, N. Y., the Dudley shoals, on Little river, six miles north of Hickory, which it will develop.

The A. E. Smith saw-mill plant at Orange, Texas, commenced operations on the 11th inst. This plant is one of the best-equipped in the South. Orange now has six large mills in full operation.

It is stated that more than two-thirds of the capital has been subscribed for a stock company to build a large planing mill at Ellisville, Miss., to be used by saw-mills in that vicinity having no planers.

At Columbia, N. C., last week the Branning Manufacturing Co.'s dry-kiln and 200,000 feet of lumber were destroyed by fire. This company has purchased the saw-mill of W. E. Liverman, which will be in running order shortly.

The shipments of lumber from the port of Mobile last week aggregated 3,681,749 feet, and of sawn timber 53,758 cubic feet. The total shipments of lumber for the season of 1899-1900 amounted on the 9th inst. to 76,667,636 superficial feet.

It is estimated that there is 75,000,000 feet of lumber lying on the Little Kanawha river and its tributaries in West Virginia awaiting a rise to carry it to market. In addition to the lumber, there are 6,000,000 railroad ties awaiting a rise.

Mr. Henry Greene of Boston, Mass., has purchased the saw and shingle mill property of J. S. Dinkle near Sanford, Fla. Mr. Greene will at once enlarge and improve the plant and engage in the manufacture of cypress lumber and shingles for the Northern market.

A branch of the American Handle Factory of Knoxville, Tenn., located at West Point, Miss., has completed a new plant, with a capacity of 200 dozen handles a day. Among the first orders is one from a Liverpool firm for 2000 dozen handles to be used by the British government in South Africa.

The Charles T. Stran Company of Baltimore, Md., for conducting a general wholesale lumber commission business,

was incorporated last week, with a capital stock of \$20,000. The incorporators are John Harker and Elbert M. Wiley of New York, and Charles T. Stran, Maurice W. Wiley and George R. Willis of Baltimore.

The Gulf Lumber Co., with a capital stock of \$75,000, was incorporated last week at Crystal River, Fla. The officers are R. J. Knight, president; Walter Ray, vice-president; N. Barco, secretary and treasurer. The company will at once erect a large saw-mill at Crystal River, and will also operate a steamboat and railway line.

The stockholders of the Lake City Land & Timber Co. of Lake City, Fla., met in that place on the 8th inst. and elected the following officers: J. E. Young, president; J. S. White, vice-president; J. E. Cailoway, secretary, and G. W. Gitzon, treasurer. The company now is thoroughly organized and has very large timber resources to draw from.

It is stated that the division of forestry at Washington is now in consultation with three important railway companies which have under consideration the raising of tie and pole timber on a large scale on their now non-utilized right of way lands. This action is due chiefly to the falling off in the supply of this material in all but the virgin timber territory of this country.

The new saw-mill of the Richmond Cedar Works, near Great Bridge, in South Norfolk, Va., is about completed, and will commence operations on the 15th inst. The mill is equipped with a single band saw with a capacity of 35,000 feet a day. It will be known as the Norfolk & Camden Lumber Co. C. R. Johnson of Richmond is general manager, and E. E. Stryker of South Norfolk, assistant.

At the final session of the eighth annual convention of the National Wholesale Dealers' Association, held last week in Baltimore, the following officers were elected: President, N. C. Lippincott of Philadelphia; first vice-president, Pendenis White of Tonawanda, N. Y.; second vice-president, C. H. Bond of Oswego, N. Y.; treasurer, Frederick W. Cole of New York city; secretary, E. T. Perry of New York city. The board of trustees selected Pittsburg, Pa., as the meeting place of the next convention.

The demand for lumber for car-building purposes at Owensboro, Ky., and sections adjacent has become of considerable volume. Mills at Owensboro now have contracts for over 3,000,000 feet, and numerous small mills all over the county are cutting from 5000 to 10,000 feet a day, all of which goes to the Pullman Palace Car Co. at Chicago. The Dean Tie Co. of the above city has contracts for 6,000,000 or 7,000,000 feet of oak lumber for railway purposes. The ordinary sawing is to be used for freight cars, and the quarter-sawn stuff for passenger coaches. Clear oak lumber is now \$13.50, and advancing.

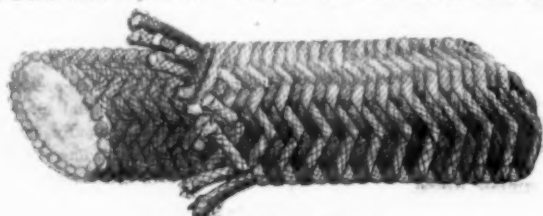
The regular monthly meeting of the Export Lumber Bureau of Information was held in Mobile on the 7th inst., with Capt. J. W. Black, chairman, and W. J. Kilduff, secretary. After considerable routine business the condition of the market was fully discussed. It was the consensus of opinion of those present at the meeting that the lumber business of the Gulf coast was in a very healthy condition, and while no steps were taken toward advancing prices, they are yet holding up firmly to the present list, with a decided upward tendency. Prime lumber was generally discussed, and it was the general opinion that it should bring \$25 per thousand. The meeting adjourned to meet April 4 next.

MECHANICAL.

Semibronze Packing.

The excellent half-tone of "Semibronze Packing" which is presented herewith gives a good idea of the construction and general appearance of it. The merits of this packing are too well known for us to call particular attention to them, as it is being used extensively by cotton mills, electric-light and power stations, steamship and railway lines, and by the United States government in several branches of its service.

Mr. W. B. Smith Whaley, the well-known cotton-mill authority in the South,



SEMIBRONZE PACKING.

in referring to "Semibronze Packing," said:

"To my personal knowledge it has filled all our wants in our mills here since we have been using it. We like it better than anything else in that line that we have been using. I enclose a copy of the report from my chief engineer of Richland Cotton Mills, where the largest amount of this packing has been used. You will see what he considers its value. I have recommended the same to my other mills."

The engineer mentioned says: "After ten years' experience, and using most all kinds of piston packing, I have found nothing that has given as good results as 'Semibronze Packing.' I have been using it on our 800-horse-power compound condensing engine for the past two and one-half years, and it has given entire satisfaction."

The Charleston Metallic Packing Co. of Charleston, S. C., the manufacturer of "Semibronze Packing," will be pleased to place some on trial with any reputable concern not already familiar with its merits, and do not ask to be paid for it unless it proves entirely satisfactory after a trial of thirty days.

This packing is handled by the principal mill-supply dealers, and any not handling it will be pleased to order it for any of their customers who specify it.

Lidgerwood Cableways.

The Lidgerwood cableway is especially adapted for dam and bridge building, open-pit mining, quarrying, sewer and canal excavating, construction work and contractors' purposes for hoisting and conveying material of all kinds.

It is particularly fitted for operation in a horizontal position, but may be inclined to suit local conditions. The main cable is of crucible or cast steel wire, and is suspended from towers or "A" frames with the ends securely anchored. The span or distance between towers ranges as high as 1000 feet.

This cable serves as a trackway upon which a traveling carriage moves, and connected with which is a fall block for raising and sustaining the load.

Three moving ropes are employed in this style of cableway—one for conveying the carriage along the main cable, and called the traversing or endless rope; another, which is connected with the fall block and used for hoisting the load, called the hoisting or fall rope; a third, or button rope, is used for displacing the fall-rope carriers from the carriage at regular intervals along the cable.

The power for operating the cableway consists of a Lidgerwood hoisting engine of special design, having double cylinders, reversible link motion and double patent friction drums and brakes. Both drums are of the same diameter, and are placed either tandem or side by side. One of these drums is grooved and carries the hoisting rope; the other is generally turned smooth and of curved form to receive the traversing or endless rope.

The traversing or endless rope is attached to each side of the carriage, on one side passing to the outer tower or "A" frame, and back to the inner tower, where the engine is located, making half a dozen turns around the curved drum on the en-

gine (or enough to secure friction), and thence back to the carriage, which serves as a link to secure the two ends, making it practically an endless rope; this rope is supported at the towers by suitable sheave wheels. It will therefore be seen that as the engine is reversible, by turning this endless rope in either direction the carriage is pulled along the cable either way as desired.

The hoisting rope passes from its drum on the engine to the carriage, and there connects with the fall block, usually by a two or three-part purchase.

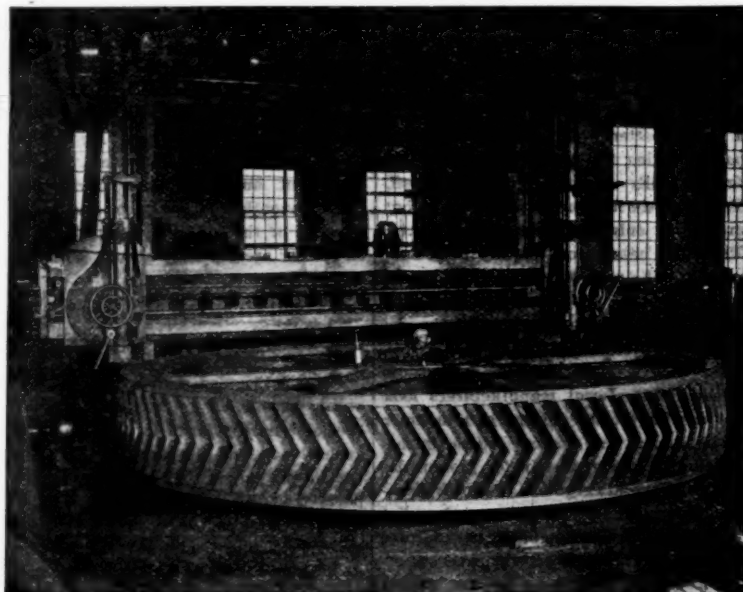
The hoisting rope is supported by a system of fall-rope carriers, upon which the successful operation of the whole cableway depends. These carriers are of simple form, with small wheels for supporting the ropes, and are carried on a horn on

Any kind of material in loads up to twelve or fifteen tons can be handled either by skips or buckets, or in the case of heavy stones, by chains or hooks. The entire operation is under the absolute control of the engine driver.

An important feature of the Lidgerwood cableways is the patent aerial dump, which permits of the load being dumped

A Large Gear Wheel.

An illustration is given of a wheel that is being made for the large plate mills of the Chester Rolling Mill Co. near East Liverpool, Ohio. The wheel has a pitch diameter of seventeen feet six inches, and an over all diameter of about eighteen feet. The teeth, as will be seen from the

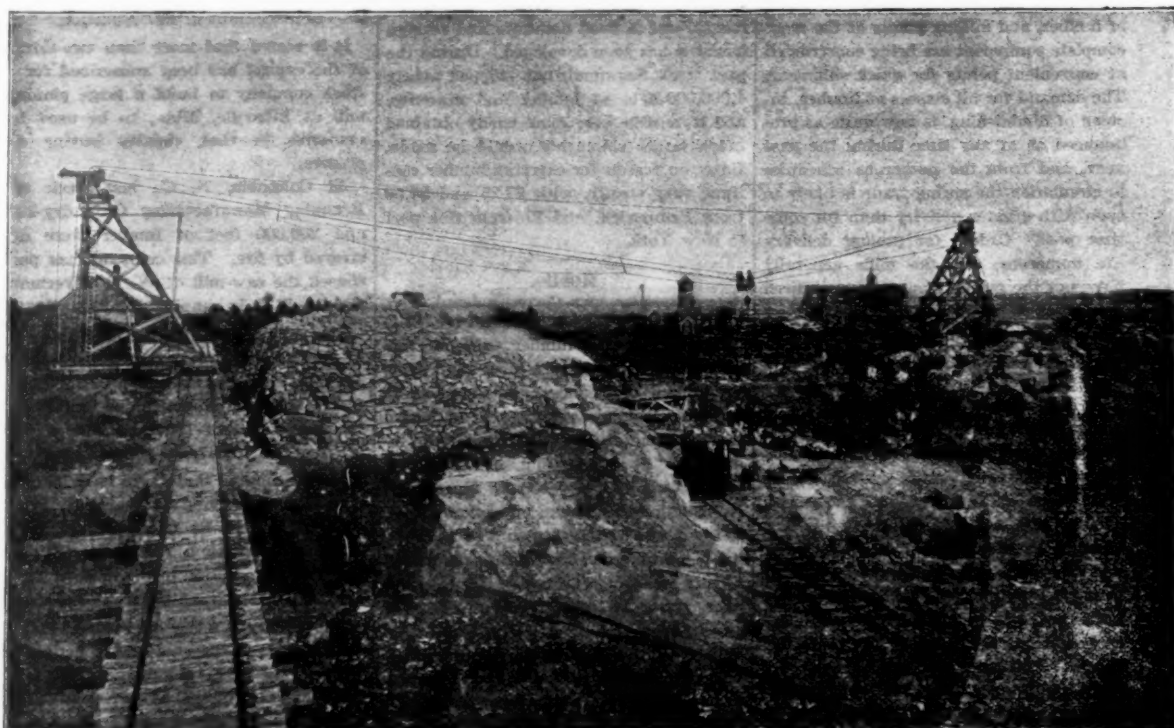


A LARGE GEAR WHEEL.

automatically in midair while the carriage is in motion, and without the employment of a man on the dump pile. The aerial dump is operated at the will of the engine driver by a simple arrangement of ropes and catches, and its use insures a large increase in the capacity of the cableway.

The engraving shows a Lidgerwood traveling cableway with a span of 315 feet, designed for loads of four tons and

photograph, are of the V-shape or helical type, 30-inch face to the wheel, two-and-one-half-inch shrouding on each side. The wheel is bored for a shaft twenty-three inches in diameter, and was cast in one piece and afterwards split for transportation and erection. The weight of the casting is about 80,000 pounds, and it required nearly two weeks for cooling it in the mold.



LIDGERWOOD TRAVELING CABLEWAY, GERRISH ISLAND, PORTSMOUTH HARBOR, MAINE.

one end of the carriage. By means of this cableway materials can be hoisted at any point on the cable and conveyed to any other point and lowered without any loss of time and without the use of any shifting locks or catches to get out of order or break.

The fall block can also be lowered by its own weight at any point on the cable,

used for handling excavated rock and placing concrete, etc.

The Lidgerwood Manufacturing Co., 96 Liberty street, New York, manufactures the cableway under twenty-one patents, and will be pleased to furnish any further information desired by our readers regarding it and other hoisting and conveying devices made by it.

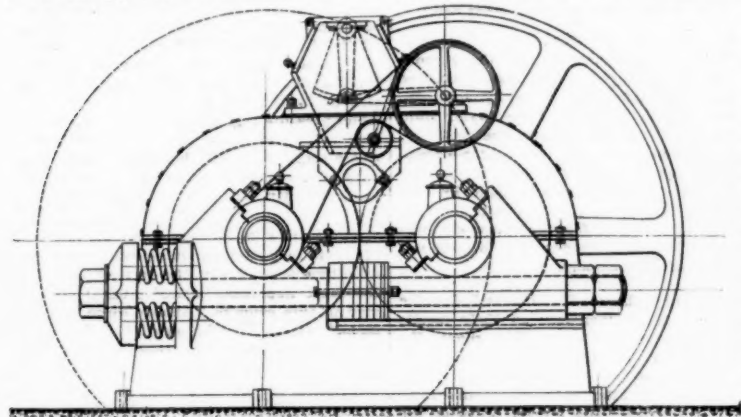
The pinion which was made to operate with this gear wheel had a face of thirty inches, diameter of seven feet, bored for a shaft nineteen inches in diameter, and the weight was about 24,000 pounds.

These gears are to be driven by a tandem compound condensing Corliss engine of 1500 horse-power built by the C. & G. Cooper Co. of Mt. Vernon, Ohio.

This large gear wheel was built by the Columbus Machine Co. of Columbus, Ohio, which is engaged in large general contract engineering work of this character. The company is also further engaged in the manufacture of one of the simplest and best gas and gasoline engines in use.

High-Grade Crushing Rolls.

The high-grade crushing rolls shown in line drawing possess several original and



HIGH-GRADE CRUSHING ROLLS.

good features. The shells are of either forged steel, cast steel or chilled iron; the inner surface, being tapered, are drawn on to the cast-iron taper hubs and held firm by means of bolts, thus admitting of removing the old shells to substitute new ones therefor. The cast-iron centers are shrunk and keyed to heavy forged mild-steel shafts, one of which rests in stationary boxes, while the other is carried in sliding pillow-blocks of the swivel or ball and socket type. Two heavy hand-wheels of equal diameter are keyed to the shafts and driven by one straight and one cross belt from the line shaft.

The roller shafts project beyond their bearings and are threaded, and split collars placed thereon, thus enabling a side adjustment. The space between the rolls is regulated by shims placed on the tension bars, which are to be removed from time to time to compensate for wear on the shells. To guard against injury to the rolls, should a hard and unyielding substance be fed into the hopper with the ore, there is placed a nest of spiral springs on the tension bars, which are so arranged that they need not be disturbed for the removal of shells, rolls or shafts.

By dispensing with the gear-wheel connections, there is produced a machine of less weight, greater efficiency, more durable qualities and permitting a higher rate of speed to be maintained, thereby increasing the capacity of the rolls.

This crushing machine is built by the Arthur Fritsch Foundry & Machine Co. of St. Louis, Mo.

Lynn Patent Water-Tube Boiler.

We present an illustration of the Lynn boiler, which consists of an upper and lower drum, connected by a series of straight tubes. It is constructed wholly of wrought metal, and all parts are very accessible for cleaning and repairs. Each drum is provided with a manhole in shell of same, and the upper drum is large enough to permit a man to stand upright when cleaning boiler. Any tube in the boiler can be removed through one of four manholes, which are placed in top head of steam drum. The boiler is supported by four heavy cast-iron brackets riveted to shell of lower drum, and does not come in contact with its brick setting at any other point, thus leaving the boiler perfectly free to expand and contract without any unequal strains on either the boiler or its brick setting. There are no flat surfaces for sediment to lodge upon;

the tubes being straight, any impurities the feed water may contain will precipitate to the lower drum, from which it can be readily blown off. The heating surfaces and combustion chambers are so arranged as to break up the currents of hot gases before they reach the stack. The furnace is external and the combustion chamber is roofed with a heavy fire-brick arch, which becomes incandescent shortly after the boiler is fired and radiates its

ester Lubricator," now manufactured exclusively by Greene, Tweed & Co. of New York city. The company says the driving and pumping mechanisms are combined on the front side of the reservoir, and the operations of both are always in full view. The speed and feed can be instantly adjusted separately or jointly to conform to any regulation required.

The oil reservoir is fitted on top with a fine cone-shaped sieve, precluding the possibility of grit or other substances which might be in the oil entering the cylinder of the engine, thereby greatly reducing the liability of the injury by cutting. The quantity of oil in the reservoir may be determined by a glance at the gauge glass attached to side. The gauge glass can be removed at any time without stopping the lubricator by simply closing the bottom valve and removing the thumb screw over the top of the glass.

The pump, attached to the side of the reservoir, is constructed with two suction and two discharge valves of hardened steel, seated one above the other, being positive and quick in action.

The ratchet wheel has an eccentric attachment for operating the plunger. The eccentric is constructed to cause a quick motion of the plunger when drawing in and discharging. The under three-way cock on top of the standpipe is a ball valve to relieve the plunger from back pressure. It needs no auxiliary hand-pumping attachments, as it is absolutely

starts and stops automatically with the engine, conforming to all variations of speed and feeding oil into the cylinders only when the engine is in action.

Change of temperature will not affect it, and it will force of any consistency against a pressure of 1000 pounds, and also feed against all vacuum. Neither is it influenced by change of steam pressure. As the oil is not brought in contact with water, it reaches the steam with lubricating qualities unimpaired, and is instantly vaporized and carried to the rubbing surfaces of valves and cylinder, instead of crawling on the pipe.

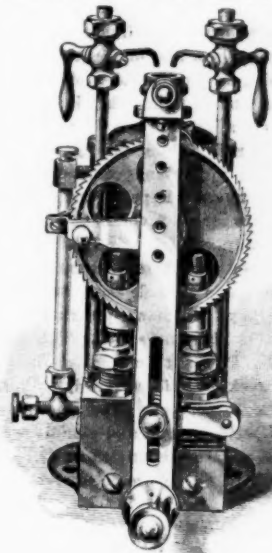


FIG. 1.

By its automatic action and regulating mechanism it will give a perfect lubrication and develop the full efficiency of the engine to which it is applied, and the makers guarantee by its use to secure a saving of from 30 to 50 per cent. of the oil consumed by other lubricators, and where the exhaust steam is condensed and returned it prevents a large per cent. of oil entering the boilers.

It can be instantly regulated to feed any amount of oil desired by simply adjusting the plunger nuts. The quantity fed is always under complete control of the engineer, and can be graduated from

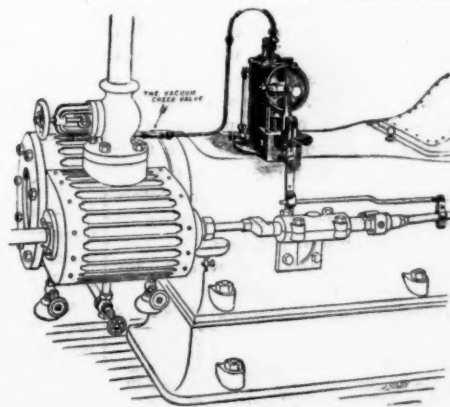
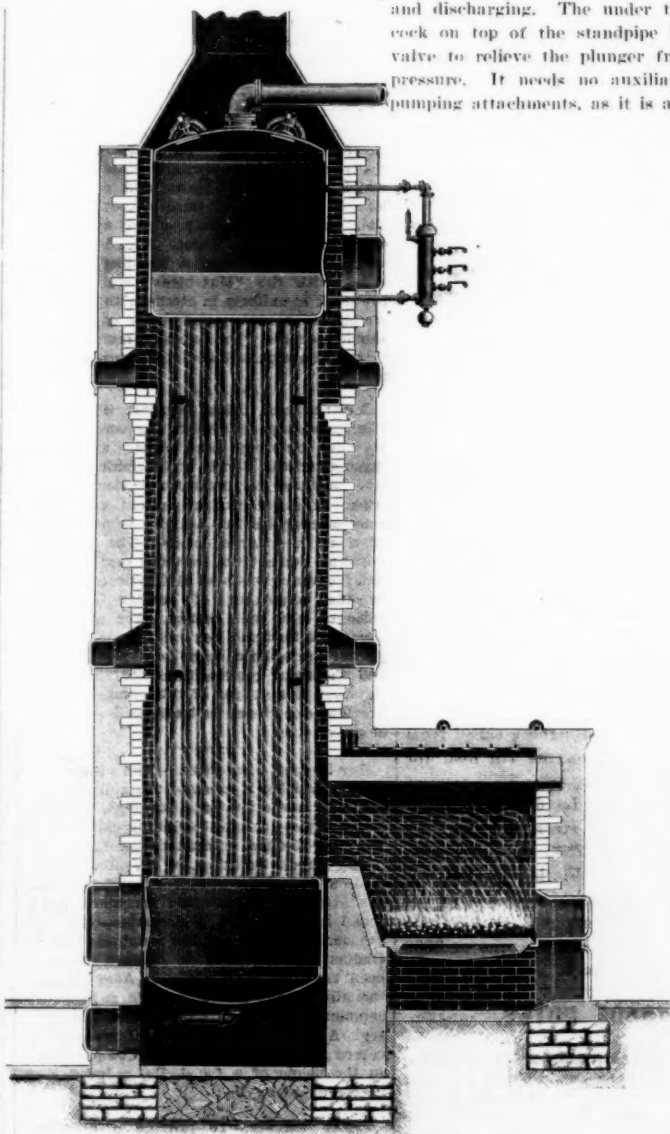


FIG. 2.

one to twenty-four drops at each stroke of plunger; when once set requires no further attention except filling, which can be done (without shutting off supply to the cylinders or drawing off water) by simply pouring the oil into the reservoir, without any possibility of spilling it, and there are no annoying features, such as breakage of sight-feed glasses, burning out of packing, etc., and the engineer is saved considerable labor and relieved of any anxiety about the perfect lubrication of his engine.

They are adapted for all styles and sizes of engines and pumps. Made in single, double, triple and quadruple feeds, each feed can be regulated independently to feed a different quantity from each,



LYNN PATENT WATER-TUBE BOILER.

contained heat directly on top of the green coal. This boiler is built by the Tudor Boiler Manufacturing Co. of Cincinnati, Ohio, in units from 100 to 250 horse-power for steam pressure of from 100 to 150 pounds.

Improved Rochester Automatic Lubricators.

The accompanying illustration shows the construction of the "Improved Roch-

ester Lubricator," now manufactured exclusively by Greene, Tweed & Co. of New York city. The company says the driving and pumping mechanisms are combined on the front side of the reservoir, and the operations of both are always in full view. The speed and feed can be instantly adjusted separately or jointly to conform to any regulation required.

The oil reservoir is fitted on top with a fine cone-shaped sieve, precluding the possibility of grit or other substances which might be in the oil entering the cylinder of the engine, thereby greatly reducing the liability of the injury by cutting. The quantity of oil in the reservoir may be determined by a glance at the gauge glass attached to side. The gauge glass can be removed at any time without stopping the lubricator by simply closing the bottom valve and removing the thumb screw over the top of the glass.

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PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., March 14.

There has been a fair movement in almost every channel of the local phosphate market during the past week. Sales of Tennessee and Florida phosphate rock were reported today, and prices obtained showed a slightly easier market. The general conditions of phosphate rock throughout the Southern phosphate belt are not materially changed from those reported a week ago. The work of development at all points is being vigorously pushed, and miners are generally shipping rock in considerable quantities. The tone of the market is a shade easier in certain cases, but Florida holders are generally asking full figures, and are cautious in making contracts with European buyers. Reports from South Carolina are very favorable, and the market steady, with a fair inquiry. In the Tennessee phosphate field miners are all engaged, and new deposits are cropping up daily, which are proving very productive in high-grade rock. The market at Mt. Pleasant was easier during the past week, but closed steady. Phosphate rock 75 per cent. bone phosphate of lime, 5 per cent. iron and alumina and 3 per cent. moisture is quoted at \$2.75 to \$3.10, and 78 to 80 per cent. export rock \$3.50 to \$4 f. o. b. Mt. Pleasant. The following phosphate characters were reported for the week ending the 13th inst.: British steamer David Mainland, 1201 tons from Fernandina to Bilbao at 19/4 April; schooner Ida C. Southard, 718 tons, from Charlotte Harbor to Baltimore or Cartaret at \$2.80; the Danish steamer Patria, 1863 tons, from Fernandina to Stettin at 21/6 April, and steamer Thomas Melville, 1066 tons, from a South Atlantic port to United Kingdom or Continent on private terms. The schooner Mary Lee Patten was chartered to load rock at Port Royal for Baltimore at \$3.

Fertilizer Ingredients.

The tone of the market for ammoniates continues to rule firm, with the volume of business only moderate. Stocks in the West are very light, and holders are firm in their views, while any urgent demand would advance prices. The demand from the East is light, but from Southern sources there is a fair inquiry, and considerable actual business has been done so far this month. Sulphate of ammonia is very steady, both for spot and future delivery. Nitrate of soda is strong on spot and for all near positions.

The following table represents the prices current at this date:

Sulphate of ammonia (gas)...	\$3 10 @ 3 12 1/2
Nitrate of soda.....	2 30 @ —
Blood.....	2 60 @ —
Hoof Meal.....	2 30 @ —
Azotine (beef).....	2 40 @ 2 50
Azotine (pork).....	2 40 @ 2 50
Tankage (concentrated).....	2 25 @ 2 30
Tankage (9 and 20).....	2 35 & 100 @ 2 40 & 10
Tankage (7 and 20).....	20 00 @ —
Fish (dry).....	20 00 @ —
Fish (acid).....	12 00 @ —

Florida Phosphate.

[Special Cor. Manufacturers' Record.]
Ocala, Fla., March 10.

The recent drop in the price of rock has been felt by the Florida miners. The most direct and noticeable results have been the closing down of H. G. Hassard's five mines at Juliette and Hood & Hassard's two, one at Dunnellon and one at Archer. The cause assigned is that their brokers across the water refused to buy the rock at the prices contracted for, which is above the present market price. Both of the miners have about two cargoes of rock on hand ready to ship, and it is thought will be able to resume mining on new contracts at no distant date.

The other miners in this section are going ahead filling contracts, and in most cases running on full time. The miners are not alarmed at the fall in prices, and do not apprehend their continuance. Prospecting continues quite brisk in several places, and several new plants are in course of construction and other contemplated.

The Inverness Mining Co. at Inverness has commenced shipping rock. It has 10,000 tons of high-grade hard rock dried and ready for shipment.

Mr. F. J. Titcomb with a crew of hands is prospecting lands for the Dunnellon Phosphate Co. in section 14 at Hernando.

Capt. W. N. Camp of the Camp Phosphate Co. and C. C. Todd were prospecting phosphate lands in Citrus county last week.

Phosphate and Fertilizer Notes.

The steamship S. T. Morgan cleared last week from Charleston, S. C., with 2003 tons of phosphate rock for Baltimore, Md.

The amount of phosphate rock shipped from the Mt. Pleasant district via Louisville & Nashville Railway for the year ending December 31, 1899, was 441,174 short tons.

Mr. C. C. Chadborn, manager of the Hanover Land & Improvement Co., of Wilmington, N. C., will have charge of the management of the company's interest in the Castle Haynes phosphate mines.

The following shipments of high-grade phosphate rock are reported from the port of Savannah for the week ending the 9th inst.: Steamer Yestor for Manchester, 1123 tons; steamer Liveland for Bremen, 506 tons, and steamer Bramham for Manchester, 637 tons.

Assistant Commissioner of Labor for Tennessee R. A. Shifflett, in his report of mining operations in Tennessee for 1899, states that the phosphate industry shows the greatest proportionate gain. The total tonnage for 1899 is reported as amounting to 462,561, a gain of 190,370 tons over 1898.

The Wilson County Phosphate Co. of Lebanon, Texas, has been incorporated, with a capital stock of \$5000. The company will do a general mining business. The incorporators are Messrs. J. H. Lester, W. D. McLaughlin, J. L. Weir, E. E. Weir, L. M. Anderson, W. Jenkins and L. Thompson, all of Lebanon.

The steamship Helsingborg sailed from Port Tampa, Fla., on the 7th inst. for Helsingborg, Sweden, with 3509 tons of phosphate from the Land Pebble Phosphate Co., and the steamship Nordkap for Bordeaux with 2646 tons of pebble phosphate from the Florida Engineering Co. The whaleback steamer City of Everett was due to arrive at Port Tampa on the 7th inst. to load a cargo of 3000 tons of phosphate rock.

TRADE NOTES.

To Run Day and Night.—An electric-lighting system has been put in at the works of the New York Blower Co. at Bucyrus, Ohio, to make it possible for it to run day and night. The orders booked by this company have been so numerous as to make more hours and more force necessary.

A Manufacturing Site.—The Chas. Efron Co. of Bayonne City, N. J., is offering a most attractive site for a manufactory. The property is located at Gibson's Point, Philadelphia, on the Schuylkill river, has three railroad sidings on it, 1000 feet of wharfage front, eighteen feet of water and other advantages.

J. M. Hayden & Co.—Messrs. J. M. Hayden & Co. of Grand Rapids, Mich., lost part of their smelting works by fire on the 8th inst. This loss has retarded somewhat the delivery of orders on hand, but in another week

they will be in a position to deliver promptly. Hayden & Co. manufacture and deal in mill supplies of all kinds.

Filters Ordered.—The New York Filter Manufacturing Co. of 26 Cortlandt street, New York city, has received an order from the Parsons Paper Co. of Holyoke, Mass., for a large addition to its present plant of Hyatt filters. An order from the city of Marinette, Wis., for a filter plant of 3,000,000 gallons capacity daily was received by the O. H. Jewell Filter Co. of Chicago. This latter company is the Western associate of the New York Filter Manufacturing Co.

The Taylor Water-Wheel.—A company has been formed and chartered for the purpose of manufacturing the sleeve-gate turbine water-wheel heretofore made by John W. Taylor of Lynchburg, Va. The Taylor Manufacturing Co. is the title of the company, and it intends to have the water-wheels, power-pumping machinery, power connections and special machinery made by contract until such time as an entirely new works is advisable for the purposes mentioned. John W. Taylor will be general manager of the company.

Cross Oil Filters.—The demand for the Cross oil filters increases as their merits become known to users throughout the world. Some recent contracts of the Burt Manufacturing Co. of Akron, Ohio, manufacturer of the filter mentioned, came from far-off countries. The largest order of the year came from Yokohama, Japan; the American Tinsmith Co. has placed its twelfth order, and the Lehigh Valley Coal Co. has ordered nine filters at once. This last-named company put in a Cross oil filter a month ago on trial, and its order follows as the result of that trial. Enough said.

Prepared Cement Wall Plaster.—The Norfolk Sand & Cement Co. of Norfolk, Va., is offering "Matchless" hard wall plaster, ready mixed with specially graded sand, which saves the plasterer and contractor lots of trouble and unsatisfactory work. This plaster is correctly mixed, and needs only water added before applying it to walls, therefore when a building is plastered with the "Matchless" wall plaster the work is uniform in strength throughout. Architects should specify and contractors should use the "Matchless" brand. Write to the above-named firm for further information.

Cements and Other Masons' Supplies.—The increasing activity in the construction of new buildings and other structures throughout the South is furnishing extensive business relations for various industries. In the matter of cement and other masons' supplies this activity is productive of many and large orders. The Carolina Portland Cement Co. (recently organized) is just beginning business at Charleston, S. C., in the importing of foreign Portland cements, and will besides offer a line of American Portland cements, together with plaster paris, hair, terra-cotta pipe, roofing and sheathing papers, lime, etc. Peyre G. Hanahan is manager of this company. His previous experience in business was in this identical line.

Hay-Budden Products.—The industrial world furnishes a constant demand for such products as die and steel forgings, weldless rings, forged tool steel spinning chucks, etc. The Hay-Budden Manufacturing Co. of 254 Henry street, Brooklyn, N. Y., offers to the trade a line of the products mentioned that has attained a reputation for merit unequalled in their class. This company is also the manufacturer of the celebrated Hay-Budden anvil, which is claimed to have been the first anvil made in America, and the advantages of which have so strongly commended it to users throughout the country. A handsome paper-weight recently received from the Hay-Budden Company was in the shape of a fac-simile, reduced size, nickle-plated anvil.

Coffee Infuser.—To provide a delicious, aromatic cup of coffee or fine flavored tea, with the best results at all times, the proper methods and device must be used. The best qualities of tea and coffee are often ruined by not using the right principle and device in making. The quick, simple and effective method of infusing the tea and coffee is by placing and confining the tea or coffee within an infuser. This is acknowledged by experts on the subject to be a method to get and retain all the good qualities in making, and not draw out the injurious substances, such as caffeine and tannic acid. Experience has taught that the old way of boiling tea and coffee not only extracts injurious substances, but its lengthy process allows the essential essence and aroma to escape

at the same time. If you are interested write for particulars of the infusers made by the Mitchell-Jamison Co. of Pittsburg, Pa.

H. Mueller of Decatur, Ill.—The metal trades and their allied interests will regret to hear of the death of Mr. H. Mueller of Decatur, Ill., which occurred on March 1. Mr. Mueller's death was the result of fearful burns received in the course of experiments several weeks ago. Hieronymus Miller invented a number of devices and machines, which have been introduced with the greatest of success to the mechanical world, and his organization, the H. Mueller Manufacturing Co., has been for years one of the leading manufacturing concerns of the United States. The trade-mark "H-M" is a familiar one to the trade using such articles as water and gas tapping machines, water-pressure regulators, corporation cocks, stop and waste cocks, hopper and check and waste cocks, etc. The business of the company will continue in the future as in the past, with Mr. Mueller's six sons in charge.

Water-Softening Plants.—The installation of plants for softening water continues to be a noticeable action in the case of some of the most important manufacturing companies in this country. Among these leading manufacturers may be mentioned the Niles Tool Works of Hamilton, Ohio, which put in a 96,000-gallon plant; Carnegie Steel Co., which put in two plants, one of 576,000 gallons capacity and one of 480,000 gallons; Youngstown (Ohio) Steel Co. put in a 240,000-gallon plant; Chicago & Alton Railroad put in a 100,000-gallon plant at Joliet and a 400,000-gallon plant at Bloomington; Westinghouse, Church, Kerr & Co. put in a 120,000-gallon plant at Fremont, Ohio. Other leading establishments put in plants of less capacity than those mentioned. These plants were manufactured and installed by the Wefugo Company, manufacturing engineers and chemists, of Cincinnati, Ohio, whose water-softening plants have gained a reputation of the very highest grade for their efficiency.

Metallic Gasket.—There is hardly an industrial plant but that knows the necessity of a perfect joint. In many classes of machinery the perfect joint is the finishing touch that enables a machine to give its owner that efficiency, durability and economy that is desired. The Merwath patent metallic gasket is one that is offered to the public using such devices. It is offered on its merits, which have been proved many times in practical experience. A card issued by the manufacturer of this gasket shows this gasket in two conditions—the first presents it as ready to be applied, its soft metal seals and the copper holds; the second condition is after use and ready for further service. In this latter instance the gasket has been in use between two flanges, which were made purposely rough to illustrate how the soft metal flows and seals all imperfections, and attention is called to the solid copper ring. A booklet or sample card can be obtained on application to the Merwath Metallic Gasket Co. of South Bethlehem, Pa.

Test of Insulating Material.—Present or prospective users of insulating material for brine pipes in refrigerating plants, or for other purposes wherein a complete and durable insulating material is required, will find the following of much interest. Professor Randolph of the Virginia Polytechnic Institute at Blacksburg, Va., made a test of "Nonpareil Cork," an insulating material. The plant used was a two-ton refrigerating and ice-making plant with brine storage system, so as to permit the refrigerating machine to be run intermittently. The cold brine circulates through refrigerator by means of steam pump, circulating pipes one and one-half inches in diameter. The insulating material tested was put on the circulating pipes between the pump and the walls of the refrigerator, these pipes passing above the brine tank and ice-harvesting floor, and hence exposed somewhat to moisture. The ammonia compression machine was in the same room, and the ammonia fumes came in contact with the material also. Four samples of material were tested, of which "Nonpareil Cork" was one. The samples were placed on the pipes and allowed to remain for six months, and at the end of that period the "Nonpareil Cork" showed no signs of breaking down at all, and the outside seemed to be about the same temperature as the external air, while the others all had ice on the outside. The other material was removed and "Nonpareil Cork" substituted, and after six months the original coating is just as good as every, there being no sign of frost except a little around the valves. "Nonpareil Cork" is made by the Nonpareil Cork Manufacturing Co., New York city; offices in Gerken Building, Chambers street and West Broadway.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as positive items of news. If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

* Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

It often occurs that the organization of a new company in a town is not known by the postmaster, and hence letters addressed to the company are returned marked "not known." The Manufacturers' Record reports the first organization of all companies, and our readers, in seeking to get into communication with them, should be very careful in deciding how to address them, and it is often advisable to add the names of one or more incorporators as an aid to the postmaster in delivering mail.

ALABAMA.

Birmingham—Telephone System.—S. B. Claypool has petitioned the city council for authority to construct telephone system.

Birmingham—Gum Factory.—Mrs. M. A. Guyton has moved the Southern Chewing Gum Factory from Atlanta, Ga., to Birmingham, and will enlarge the plant.

Birmingham—Bakery.—The National Biscuit Co. will erect a \$75,000 bakery; M. J. Mullally, local manager.

Birmingham—Iron Mines.—Pauls & McCormick are developing ore mines near Birmingham with capacity of ten cars per day. About \$15,000 is being spent for equipment at these mines.

Calais—Limestone Quarry.—T. H. Spencer of Birmingham is opening a limestone quarry at Calais; capacity ten to fifteen cars per day.

Courtland—Cotton Compress.—The Courtland Round Lap Bale Co. will increase size of its plant (as lately reported) by adding four new gins, with necessary power to run them. T. W. Pratt of Huntsville, Ala., can give particulars.

Decatur—Coal Mines.—Dr. J. J. Barclay has discovered coal on his property near Decatur, and will probably develop.

Eufaula—Cotton Mills.—The Eufaula Cotton Mills will make improvements, including the erection of an engine-room 28x50 feet, in which will be installed two Corliss engines, 400 horse-power each; thirty-two looms and 1040 spindles will also be installed; present equipment 10,463 spindles and 321 looms.

Girard—Cotton Mill.—The Chattahoochee Knitting Mills, which has been idle for some time, has been secured by parties who will equip it as a cotton mill.

Guntersville—Cotton Compress.—The American Cotton Co. (T. W. Pratt, Huntsville, Ala., district manager) will build round-bale compress at Guntersville.

New Decatur—Cotton Mill.—A proposition has been made for the establishment of a \$50,000 cotton-yarn mill, provided the citizens will donate site of twenty acres and subscribe \$15,000 to the capital stock. Address secretary Commercial Club.

New Decatur—Bridge Works.—The Groton Bridge & Manufacturing Co. of Groton, N.

Y., will establish works in New Decatur to cost over \$1,000,000, having acquired the site and plant known as the old United States Rolling Stock Works.*

Newhope—Cotton Compress.—The American Cotton Co. (T. W. Pratt, Huntsville, Ala., district manager) will build round-bale compress at Newhope.

Tusculum—Cotton-oil Mill.—Henderson & Julian will erect a cottonseed-oil mill to be operated in connection with their round-lap press and gin. Address O. N. Julian.

Verbena—Ginnery.—F. B. Baldwin will erect the ginnery reported last week; contracts have been awarded.

ARKANSAS.

Calamine—The American Zinc Co. contemplates establishing a new zinc plant.

Dodd City—Mining.—The Nokomis Mining Co. has been incorporated, with capital stock of \$250,000, by James C. Levy, Albert S. Levy, James Burns and others.

Little Rock—Real-estate Improvement.—Chartered: The Pochontas Real Estate & Improvement Co., by A. J. Witt, W. T. Bishop, B. A. Brown and others, with capital stock of \$5000.

Little Rock—Foundry and Machine Shops.—The Wing-Sayle Foundry & Machine Co. has been incorporated, with capital stock of \$5000, by D. R. Wing, president; C. M. Wing, vice-president; Claude Sayle, secretary and treasurer.

FLORIDA.

Inverness—Saw-mill.—Lawson Howell of Valdosta, Ga., and others contemplate building a large saw-mill at Inverness.

Jacksonville—Soap Factory.—Efforts are being made for the establishment of a \$15,000 soap factory. For information address Chas. H. Smith, secretary Board of Trade.

Sanford—Saw-mill.—Henry Greene of Boston, Mass., has purchased the saw and shingle mill of J. S. Dinkle, near Sanford, and will enlarge and improve for the manufacture of cypress lumber and shingles.

Tampa—Cigar-box Factory.—The cigar manufacturers of Tampa have organized a company (as lately reported), with capital stock of \$30,000, to manufacture their cigar boxes; capacity 10,000 boxes per day.

GEORGIA.

Athens—Water-power Development.—The Tallahassee shoals power of 1000 horse-power capacity has recently been purchased by parties who will proceed at once to develop it. Address W. T. Bryan.*

Atlanta—Ice Factory.—It is reported that the agents of the Armour Packing Co., Swift & Co., the Hammond Packing Co., the Cudahy Packing Co., Nelson Morris & Co. and the S. & S. Beef Co. are forming a combination at Atlanta for the establishment of a 50-ton-per-day ice plant.

Atlanta—Steam Plant.—The Atlanta Steam Co., organized, as recently reported, for installing steam mains and supplying steam heat to private customers; contract for installation has already been made. Address E. Woodruff.

Atlanta—Cotton Mill.—S. A. Carter, who was recently reported as to invest \$100,000 in a cotton mill, has, with W. S. Elkin, Frank Hawkins and J. Carroll Payne, incorporated the Piedmont Manufacturing Co., with capital stock of \$100,000, and privilege of increasing to \$500,000; will build 5000-spindle plant.

Augusta—Transportation Company.—The Southern Transportation Co. has been organized, with J. T. Bothwell, president; W. T. Gibson, vice-president; Walter Gibson, secretary and treasurer; capital stock \$30,000.

Blakely—Electric-light Plant and Water-works.—The city will hold an election on April 7 to decide construction of water-works and electric-light plant lately mentioned. Address W. L. McDowell, city clerk.

Canton—Rope Mill.—A mill for making rope will probably be established. Address J. D. Johnston, Box 31.*

Carroll County—Gold Mining.—The Southern Klondike Mining Co. has been organized, with W. B. Owen, president; C. E. Garner, vice-president; L. Furchgott, secretary and treasurer, all of Jacksonville, Fla., for the development of 500 acres of gold lands in Carroll and Douglas counties, Ga. Company has ordered a reducing plant to cost \$50,000 which will have a capacity of 100 tons a day; it includes twenty stamps for pulverizing the ore, with the necessary

accompanying machinery for washing and reducing.

Cartersville—Mining.—J. L. Gaines of Tennessee, L. S. Munford and L. N. Gilreath have incorporated the Felton Mining Co. for mining and treating ores and minerals of all kinds; capital stock \$5000.

Cedartown—Cotton-oil Mill.—J. E. Houseal of Cedartown and J. A. Wynne of Rome, Ga., and associates, lately reported as to organize a company for the establishment of a 25-ton cottonseed-oil mill, have incorporated the Cedartown Cotton Oil Co., with capital stock of \$15,000.

Columbus—Cotton Mill.—C. L. Perkins has formed a \$25,000 company to establish mill for utilizing waste from cotton mills in the manufacture of wadding and batting.

Columbus—Cotton-oil Mill.—The Georgia Cotton Oil Co. will erect new building and expend about \$10,000 in improvements.

Columbus—Cotton Mill.—The Bibb Manufacturing Co. of Macon, Ga., has purchased site at \$15,000 and will erect a 20,000-spindle cotton mill near Columbus. This company has secured control of the Columbus Power Co., which is now developing 8000 horse-power at the Chattahoochee river and building a large power plant, by purchasing the late addition (\$100,000) to the stock of the company.

Douglasville—Cotton Mills.—J. S. James writes that work will be commenced next month on the 10,000-spindle mill, previously reported as projected by him for erection at Sweetwater Creek; it will be entitled the Austell Cotton Mills, and cost about \$200,000.*

Fort Valley—Crate Factory.—The Albaugh (Ga.) Fruit Co. has established crate factory, as recently reported; capacity 2000 made-up crates per day, which capacity will be enlarged next season.

Gainesville—Cotton Mill.—J. T. Woodside of Greenville, S. C., has made a proposition to invest \$100,000 in a \$200,000 cotton factory for Gainesville, provided the citizens will subscribe \$100,000. Efforts are being made to secure the amount of capital, and in all probability the Woodside Cotton Mills will be organized. Z. T. Castleberry and Mayor Mitchell are also interested.

Gordon—Cotton-oil Mill.—A company is being formed for the manufacture of cottonseed oil and fertilizers. Names of interested parties will be announced later.

Gordon—Paint Factory.—D. G. Lee & Co. will establish a paint factory.

Griffin—Cotton Mill.—A cotton-mill company with capital stock of \$100,000 is being formed to build a plant. Col. B. N. Barrows is interested.

La Grange—Saw-mill, Coffin Factory, etc.—The Independent Order of the Mutual Aid Society (negro organization) has completed its saw-mill, recently reported to be built, and will soon begin work on coffin factory with capacity of fifty coffins per day.

La Grange—Cotton Mill.—F. E. Callaway, S. P. Smith, J. E. Dunson, S. H. Truitt, A. H. Nunnally and others have incorporated the Unity Cotton Mills, with capital stock of \$100,000, and privilege of increasing to \$250,000, for the establishment of a cotton mill.

Lovett—Cotton-oil Mill.—Efforts are being made for the establishment of a cottonseed-oil mill. Names of interested parties will be announced later.

Macon—Knitting Mill.—Floyd Schofield, lately reported to erect a knitting mill, has, with S. H. Rogers and Harry L. Jones, incorporated the Schofield Manufacturing Co., with capital stock of \$25,000, and privilege of increasing to \$200,000, for the establishment of the mill; will manufacture cotton yarns and cloth, knit goods, underwear, etc.

Macon—Cotton Mill.—The Payne Cotton Mills is installing 1700 additional spindles (not 3000, as reported lately); contracts awarded.

Madison—Cotton Mill.—A company will be organized, with capital stock of \$100,000, for building a cotton mill. Address Judge H. W. Baldwin.

Millen—Cotton Mill.—J. H. Daniel is president; S. W. Palmer, vice-president, and R. G. Daniel, secretary and treasurer, of the cotton-mill company reported recently as organizing for the establishment of a \$100,000 cotton mill.

Nicholls—Saw-mill.—D. W. Lott and J. I. Hatfield will build a 12,000-foot capacity saw-mill.

Quitman—Cotton-oil Mill.—A cottonseed-oil mill is being considered (as recently reported); capacity not to exceed sixty tons. Address J. B. Rountree.

Reynolds—Chalk Mine.—Chalk mine is being developed on the property of F. C. Goodwin.

Savannah—Extract Works.—The Southern Pine Tar Chemical Co. is installing a plant for manufacturing various extracts from pine, such as tar, creosote, wood alcohol, acetic acid and other products. It is also reported that the company will engage in the manufacture of rosin oil.

Savannah—Rosin-oil Plant.—B. F. Finney will establish a small experimental plant for the manufacture of rosin oil and other pine products.

Sparta—Cotton Mill.—D. P. Ferguson is endeavoring to organize a stock company to put in operation the Sparta Cotton Mills, as lately reported; plant has 5120 spindles and complement.

Tallahassee—Glass Works.—The Dixie Glass Works, already established, has been incorporated, with capital stock of \$35,000, by C. A. Norton, W. H. Meachman and N. C. Matthews.

Tifton—Cotton Mill.—The Tifton Cotton Mills has effected a permanent organization, with H. H. Tift, president; W. S. Witham, secretary, and L. G. Maynard, treasurer; company proposes to install 4000 spindles, and later on 125 looms; capital stock \$60,000, with privilege of increasing to \$500,000.

Toccoa—Cotton Mill.—The Toccoa Cotton Mill will install \$25,000 worth of new machinery, contract for which has been awarded; present equipment 5000 spindles, 160 looms.

Valdosta—Cotton Mill.—The company reported last week as to be organized by J. N. Griffin, J. L. Staten, J. F. Lewis, C. W. Lamar, W. H. Griffin and others will apply for charter; it will build a 5000-spindle mill; two-story building 75x300 feet will be erected.

Valdosta—Knitting Mill.—H. Y. Tillman, B. W. Bentley, M. B. Lane and others, reported last week as to establish knitting mill, have incorporated the Tillman Manufacturing Co., with capital stock of \$20,000, and privilege of increasing to \$200,000; company has organized for the purpose of making knit goods. Address H. Y. Tillman.*

KENTUCKY.

Glasgow—Water-works.—J. P. Donohou and E. G. Coon of Wilkesbarre, Pa., have purchased one-half interest in the Glasgow water-works and will build large standpipe and make other improvements; about \$15,000 will be added to the capital stock.

Greenwood—Coal and Timber Lands.—The Beaver Creek coal and timber lands have been sold to a party of Pennsylvania capitalists, who will proceed at once to develop the timber and extend the railroad; new ties will be put in and the engines and trucks overhauled; property consists of 34,000 acres of coal and timber land. The consideration for the new plant is \$150,000. For full information regarding address J. P. Hornaday, Somerset, Ky.

Henderson—Power Plant.—The Henderson Street Railway Co. will reorganize and enlarge and improve its power plant, adding new rolling stock, motors, etc.

Louisville—Bottle Factory.—The Louisville Bottle Manufacturing Co., lately reported as incorporated, has established a \$7000 plant for manufacturing bottles, etc., and it will double capacity during the summer; Wm. A. Eubank, president.

Louisville—Refrigerator Transit Company.—Walter Werner, Barret Gibson, Thomas S. Jones and others have incorporated the Western Refrigerator Transit Co., with capital stock of \$100,000.

Owensboro—Carriage, etc., Factory.—J. H. Hickman and others have organized a company for the manufacture of buggies, as lately reported.*

Owensboro—Ice and Cold-storage Plant.—W. E. Chess, L. H. Wymond and T. L. Fitch of Louisville and H. D. Fitch of Bowling Green have incorporated the People's Ice & Cold Storage Co. for erection of large ice and cold-storage plant at Owensboro.

Owensboro—Mercantile.—Chartered: The E. W. Smith Co., with capital stock of \$12,500, by E. W. Smith and others.

Owensboro—Pants Factory.—The Owensboro Pants Manufacturing Co. has been in-

corporated, with capital stock of \$25,000, by J. H. Ditto, M. A. Nelson, James A. Small and E. S. Foote.

Owensboro—Real Estate.—The Owensboro Real Estate & Loan Co. has been incorporated, with capital stock of \$6000, by L. Reno, R. A. Hagan and J. E. Hayden.

Owensboro—Corn Elevator.—The Marsden company states that it will not erect a corn elevator, as has been reported.

Paducah—Iron Furnace.—Peter Arlund & Co. of Louisville, Ky., have incorporated the Kentucky Furnace Co. to operate the Paducah furnace, as recently reported; furnace is undergoing repairs, and will be blown in about April 1; 300 operatives will be employed at furnace and mines.*

Paducah—Handle Works.—The Clark-Danforth Handle Works of Lawrenceville, Ill., will locate in Paducah; building will be two stories, 80x100 feet.

Paducah—Mining, etc.—E. P. Gibson, J. W. Sevier and John Davis have incorporated the Tlatac Mining & Mineral Co., with capital stock of \$10,000, to conduct a general mining and development business.

Somerset—Oil Refinery.—The Pennsylvania capitalists who have recently purchased the Kentucky oil and pipe-line property are now negotiating for the erection of an oil refinery to cost \$50,000.

Somerset—Light and Power Plant and Ice Factory.—Cincinnati and local capitalists are figuring on building a street railway, in connection with which they will erect a light and power plant and possibly add ice machinery. Address J. P. Hornaday.*

Sturgis—Cooperage Factory.—The Woodruff-Kroy Co. of Davenport, Iowa (coopers), will establish stave, hoop and heading factory at Sturgis.

LOUISIANA.

Crowley—Rice Mill.—The Union Rice Milling Co., Limited, has been organized by Jas. R. Webster, J. F. Foley, J. B. Foley, B. F. Carper and others for the establishment of a rice mill with capacity of 1000 barrels every twenty-four hours, and with storage capacity of 100,000 bags of rough rice. A large warehouse for clean rice will also be built; capital stock \$50,000.

Jennings—Irrigation Plant.—The Lacasine Irrigation Co. will add a 30-inch pump to its plant; P. B. Haber, president.

Lake Arthur—Rice Cultivation.—Howard Ackerman of New York, N. Y., has optioned 20,000 acres of land about Lake Arthur for the American Rice Co., a corporation with \$1,000,000 capital, for cultivation.

Laurel—Cotton Mill.—The Laurel Cotton Mills (lately reported organized for establishment of 15,000-spindle and 500-loom mill) is now ready to receive bids for erection of the plant; John Hopkinson, superintendent.

Nashboro (P. O. at Mill Creek).—T. C. Farraby of Arkansas has purchased timber lands at Nashboro, and contemplates building a saw-mill.

New Orleans—Rice-land Development, etc. The American Drainage, Irrigation & Colonization Co. has been organized, with capital stock of \$150,000, for the development of rice and other agricultural lands. Cornelius A. Dorrestein of Amsterdam, Holland, has invented and patented a new device for controlling the water used in the cultivation of lands, and is interested in the company.

Soulsouque—Sugar-house.—A. S. & J. H. Curso will rebuild the sugar-house on their Ella plantation, having purchased the machinery of the Margaret sugar-house, near St. Gabriel, which they will remove to Ella.

Welsh—Rice Mill.—The company recently reported as organizing with Chas. P. Martin, president, for the establishment of a mill with capacity of 400 barrels per twelve hours, will be known as the Calcasieu Rice Milling Co. Contract for machinery has been awarded.

MARYLAND.

Baltimore—Paving, etc.—A bill has been introduced in the legislature to incorporate Shreve & Co., incorporated, to conduct a general paving and dredging business, by Arthur L. Shreve and others; capital stock is \$15,000, with privilege of increasing to \$100,000.

Baltimore—Lumber Company.—The Chas. T. Stran Co. has been incorporated to conduct a general lumber business by John A. Harker and Elbert M. Wiley of New York, Chas. T. Stran, Maurice M. Wiley and Geo. R. Willis; capital stock \$20,000.

Baltimore—Bolt and Iron Works.—The Lawrence Bolt and Iron Works has been incorporated for the manufacture of builders' and iron structural work, by Joseph B. Backhoff, E. C. Lawrence, Thomas E. Barrett and others; capital stock \$5000.

Baltimore—Chemical Company.—The Goodwill Chemical Co. has been incorporated by William N. Wamsley, Geo. S. Teller, H. E. Wofford and others; capital stock \$100,000.

Baltimore—Clay Company.—The South Mountain Clay Co. has been incorporated, with capital stock of \$1000, by Emanuel Ellinger, John G. Mengel, Rufus W. Applegarth and others.

Baltimore—Realty Company.—Chartered: The Maryland Realty Corporation, for dealing in lands, etc., by L. G. Turner, Geo. A. Bryant, Clinton M. Johnson and others; capital stock \$50,000.

Easton—Umbrella Factory.—Williams, Adams, White & Co., lately reported incorporated for manufacture of umbrellas and parasols, has capacity of 500 per day when in full operation, and expects to increase in a short time; J. T. White, secretary.

Elkton—Iron Furnace, Rolling Mill, etc.—The Wheeling (W. Va.) Corrugating Co. has, it is reported, purchased the property of the Whitaker Iron Co. in Cecil county; with the sale is included the Principio furnace and rolling mills at Principio and about 8000 acres of woodland.

MISSISSIPPI.

Holly Springs—Water-works.—A bill has been introduced in the legislature authorizing the city to issue bonds for enlargement of its water-works system. Address "The Mayor."

Vicksburg—Water-works System.—A bill has been introduced in the legislature authorizing the issuance of \$300,000 of bonds for water-works system, etc. Address "The Mayor."

Yazoo City—Brick and Tile Works.—The Montgomery Land Co. has been incorporated by L. G. Montgomery, J. T. Montgomery, R. L. Bennett, W. A. Henry and others, with capital stock of \$10,000; company has purchased property and will improve it; establish brick and tile plant, etc.

Yazoo City—Cotton Mill.—The Yazoo Cotton Mill Co., previously reported incorporated, has completed its organization with J. M. Barnwell, president, and L. C. Montgomery, secretary. The establishment of the mill is now assured.

MISSOURI.

Creighton—Brick Works.—The Creighton Clay Co., recently reported incorporated, will establish brick and tile plant with capacity of 20,000 bricks; L. E. Chamberlin, president.*

Fayette—Mercantile.—Chartered: The L. S. Prosser Dry Goods Co., with capital stock of \$10,000, by L. S. Prosser and others.

Kansas City—Cotton-oil Mill.—A cotton-seed-oil mill with capacity of 100 tons per day will be erected at a cost of \$100,000 by a company promoted by David Boaz of Rosedale, Kans.

Kansas City—Lumber Company.—Chartered: The Long-McCue Lumber Co., with capital stock of \$20,000, by R. A. Long, T. J. McCue and S. H. Wilson.

La Grange—Pearl-button Factory.—The La Grange Pearl Button Co., lately reported incorporated, has a pearl-button factory, with capacity of 200 gross per day, already in operation.

St. Louis—Cigar Company.—The Waldorf Cigar Co. has been incorporated to deal in cigars and tobacco, with capital stock of \$2000, by H. Harms and others.

St. Louis—Hay and Grain Company.—Luehrmann Bros. Hay & Grain Co. has been incorporated, with capital stock of \$10,000, by George E. W. Luehrmann and others.

NORTH CAROLINA.

Asheville—Telephone Company.—The Asheville Telephone Co. has been incorporated to conduct a telephone business in all its branches, including the manufacture of instruments and electrical supplies; capital stock \$80,000, with privilege of increasing to \$185,000; incorporators, Charity Rusk Craig, Harlan P. Proctor and L. J. Rusk of Wisconsin, W. S. Proctor, E. R. Craig and others.

Elizabeth City—Canning Factory.—Hemmingsway & Co. have established a canning factory in connection with their oyster plant.

Elkin—Cotton Mill.—The Chatham Manufacturing Co. has placed contracts for the 10,000-spindle cotton mill, reported in our last issue as being built by H. G. Chatham. The company's \$200,000 cotton mill will be an addition to its present \$100,000 woolen mill. H. G. Chatham is president.

Gastonia—Brick Works.—Frank H. Reid, S. S. McNinch & Co. and B. D. Springs, all of Charlotte, N. C., have organized the Reid

Brick Co. for the establishment of brick works at Gastonia; machinery contracted for.

Goldsboro—Cotton Mill.—The Borden Manufacturing Co. has been incorporated, with capital stock of \$100,000, for the manufacture of hosiery yarns, etc., and will install 6000 spindles; building to be of brick, 75x275 feet; Frank K. Borden, Jr., secretary and treasurer.

Hamlet—Ice and Refrigerating Plant.—Chas. E. Johnson, A. F. Thompson and J. Ludlow Skinner have incorporated the Hamlet Ice Co., with capital stock of \$10,000, with privilege of increasing to \$50,000, for establishment of an ice and cold-storage plant with daily capacity of twenty-five tons and a refrigerating capacity of forty tons.

Henderson—Knitting Mill.—L. L. Strause and associates will organize a \$50,000 company for the establishment of a knitting mill.

Manchester—Lumber Mill, Planing Mill, etc.—W. W. Fitzhugh and J. B. McCormick have incorporated as Fitzhugh & McCormick, as lately reported, for the establishment of a lumber mill with daily capacity of 20,000 feet. They will in all probability put in planing mill and dry-kiln later on.

Rutherfordton—Knitting Mill.—A hosiery mill will be established. Address M. A. Henderson.*

Spray—Cotton Mill.—The Lily Cotton Mills, lately reported incorporated, has erected building and is now installing machinery for the manufacture of colored cloths; J. S. McAllister, secretary and treasurer.

Taylorsville—Furniture Factory.—A furniture factory may be established. Address E. L. Hedrick.

Warrenton—Cotton Mill.—A cotton-mill company is being organized. Address W. A. Harwell, mayor.

Warrenton—Cotton Mill.—Efforts are being made for the organization of a \$50,000 stock company for the establishment of a cotton factory. W. B. Boyd, E. S. Allen, B. P. Davis and others are interested.

Washington—Paint Factory.—The Carolina Gas & Chemical Co. will enlarge its plant.*

Wilkesboro—Furniture Factories.—One or more furniture factories will be built this fall; one will probably be built this spring. Address J. I. Wellborn.

Wilmington—Shirt and Collar Factory.—A Troy (N. Y.) party is in correspondence with Robert R. Bellamy relative to the practicability of organizing a \$50,000 company in Wilmington for the establishment of a shirt and collar factory.

Wilson—Guano Factory.—A guano factory to cost \$20,000 will be established. Address R. G. Briggs.

Winston—Furniture, etc., Factory.—The Oakland Manufacturing Co. has been incorporated for manufacture of furniture and other articles of wood, metal or leather; may also mine and smelt ores and minerals; capital stock is \$20,000, with privilege of increasing to \$500,000; incorporators, W. P. Hill, John W. Fries, William A. Blair, R. J. Reynolds and B. F. Huntley.

Winston—Cotton Mill.—R. J. Reynolds, W. A. Lemly, A. E. Holton and J. J. Wallace will organize a company to establish cotton mill.

Winston-Salem—Ice Plant.—The Fries Manufacturing & Power Co. has purchased and will install a 30-ton ice plant.

SOUTH CAROLINA.

Aiken—Cotton Mill.—The Croft Manufacturing Co. has been incorporated for the purpose of building a 25,000-spindle and probably 750-loom mill near Aiken for manufacture of print cloths; incorporators, Chas. Warren Davis, Augusta, Ga.; Arthur S. Wattle, Canton Junction, Mass.; Benj. W. Tingley, Philadelphia, Pa.; T. G. Croft and G. W. Croft, Aiken; cost of mill about \$600,000. Address for particulars Chas. Warren Davis, No. 5 Library Building, Augusta, Ga.*

Anderson—Water-power Development, etc. The Georgia-Carolina Manufacturing Co., recently reported as organized to build a cotton mill and to obtain its power from the Tugaloo river, near Hattons Ford, will develop 15,000 horse-power at an expense of about \$200,000. Address James J. Fretwell.

Blenheim—Telephone Company.—Dr. J. L. Napier and Dr. Charles Napier of Blenheim, C. P. Hodges of Brownville and others have incorporated the Blenheim & Brownville Telephone Co., with capital of \$500.

Charleston—Cement, etc.—The Carolina Portland Cement Co. has been organized recently to deal in and import Portland cements and other supplies for masons, etc. J. Ross Hanahan is president; Thos. H.

Moffett, treasurer, and Peyre G. Hanahan, manager.*

Cheraw—Cotton Mill.—Northern capitalists have become interested in the Cheraw Cotton Mills, lately reported organized with capital stock of \$100,000, which will be increased to \$200,000. Options have been secured on 1000 acres of land near Cheraw, also on a water-power. J. C. Henvis, Drexel Building, Philadelphia, Pa., can be addressed.

Easley—Cotton Mill.—The Easley Cotton Mills, reported last week as incorporated, has its plant in course of construction, and expects to complete within a few months. Orders for about all of the machinery have been placed. The spindles will number 10,000; J. M. Geer, president.

Fairforest—Cotton-oll Mill.—The Fairforest Oil Mill Co., lately reported as having increased its capital stock, has done so for the purpose partly of installing additional machinery.

Greenville—Flour Mill.—Dr. C. C. Jones, H. T. Stroud, J. H. Morgan, S. L. McRee and others are organizing a \$6000 company for the establishment of a 30-barrel roller flour mill.

Greenville—Cotton Mill.—The F. W. Poe Manufacturing Co. will increase its capital stock from \$250,000 to \$500,000, and will build a duplicate of its present mill of 25,000 spindles and 752 looms to cost about \$500,000.

Hartsville—Saw-mill.—H. A. Edwards will establish a saw-mill at Levensworth.

Laurens—Cotton Mill and Water-power Development.—W. R. Ritchey and associates will, it is reported, develop the Ware shoals water-power and erect a cotton mill and electric-light plant and power plant to furnish light and power for Laurens and other towns.

South Carolina—Sash, Door and Blind Factory.—The Percival Manufacturing Co. has been incorporated to manufacture sash, doors, blinds, etc., with John D. Capleman, president; E. W. Percival, vice-president; O. C. Beckham, secretary and treasurer; capital stock \$16,000.

Troy—Cotton Mill.—Efforts are being made for the organization of a company to establish a cotton mill. Address A. J. Davis, who is interested.

Woodruff—Cotton Mill.—The company reported last week as organizing with capital stock of \$250,000 for establishment of a cotton mill has incorporated as the Woodruff Cotton Mill Co., with Ellison A. Smith of Pelzer, S. C.; A. W. Smith of Abbeville, S. C., and Lewis W. Parker of Greenville at the head of the enterprise.

TENNESSEE.

Centerville—Brick Works.—The Centerville Brick Co. has been organized by J. B. Walker, J. B. Stuart, A. H. Grigsby, John C. Cunningham and others for the manufacture of brick.

Chattanooga—Foundry and Machine Shops. The Wheland Foundry & Machine Co. will build another addition to its plant and install new machinery.

Fayetteville—Spoke Factory.—The Bucks Milling & Manufacturing Co., lately reported as incorporated to manufacture cloth out of cotton, states that it will not make cotton cloth this year, its present purpose being the manufacture of buggy and wagon spokes.

Fayetteville—Cotton Mill.—The Elk Cotton Mills has been incorporated by R. D. Warren, H. K. Holdman, C. L. Bagley, J. H. Reese and others for the establishment of a 5000-spindle mill; capital stock \$50,000.

Fayetteville—Distillery.—Ernest B. Cole will establish a distillery with capacity of 100 gallons of whiskey per day.

Gallatin—Water-works.—Rosser & Castor of Bellaire, Ohio, have been awarded contract at \$40,000 for constructing water-works at Gallatin.

Hall's—Supply Company.—Chartered: The Hall's Supply Co., by I. B. Tigrett, W. H. Saulsbury, Edward Hart and others; capital stock \$5000.

Harriman—Cotton Mill.—W. B. Crinkley and associates, lately reported as establishing a \$100,000 cotton mill, have purchased the S. K. Paige Lumber & Manufacturing Co.'s plant, and will convert it into a cotton mill; warehouses and other buildings necessary will be erected at once. Among those interested are W. B. Andrew, A. M. and Jas. A. Crinkley.

Lebanon—Phosphate Company.—The Wilson County Phosphate Co. has been incorporated to conduct general mining business, with capital stock of \$5000, by J. H. Lester, W. D. McLaughlin, J. L. Weir and others.

Marion County—Drug Company.—Charter-

ed: The Sartin Drug Co., by L. B. Sartin, George Mitchell and J. P. Gillen; capital stock \$6000.

Nashville—Furniture Company.—Chartered: The Walker-Burk Furniture Co., with capital stock of \$4000, by W. C. Burk, I. A. Brown, R. P. Purse and others.

Nashville—Hardwood Company.—The American Hardwood Co. has been incorporated by S. D. Albright, H. C. Albright, J. B. Stephens and others; capital stock \$100,000.

Nashville—Vinegar Factory.—Bransford & Brennan have purchased the Southern Vinegar Works, and will remove the machinery and fixtures to 155 South Market street, adjoining their refinery; the capacity, with improvements contemplated, will be one car of vinegar per day; they contemplate adding the necessary facilities for evaporating.

Pinkney—Blast Furnaces, etc.—The Pinkney Mining Co. contemplates making extensive improvements, and it is claimed that it may build a couple of blast furnaces of large capacity.

Sequatchie—Handle Works.—The Sequatchie Handle Works has installed machinery for the manufacture of singletrees and wagon stock.

St. Elmo—Iron-ore Mines.—John G. Rawlings and associates have ordered machinery for extensive development of iron-ore mines.

Tennessee—Chair Factory.—A. H. Ordway & Co. of Framingham, Mass., will establish a chair factory in East Tennessee (as lately reported under Knoxville), but have not yet decided on location.

Tullahoma—Furniture Factory and Foundry.—H. H. Stoner and C. H. Lawton of Wabash, Ind., are investigating with a view of removing their furniture factory and foundry to Tullahoma.

TEXAS.

Albany—Flour Mill and Elevator.—The Pioneer Mill & Elevator Co., lately reported as organized for establishment of flour mill, etc., has plant at Albany in operation and one at Stamford in course of construction.

Austin—Ice and Bottling Company.—Chartered: The Austin Ice & Bottling Co., with capital stock of \$30,000, by Joseph Breck, M. G. Terry and Walter Quebedaux.

Bryan—Cotton Gin and Compress.—The Bryan Cottonseed Oil Co. will install a complete 16-stand gin outfit, with both round and square bale presses, to be operated in connection with its mill.

Childress—Telephone System.—The Panhandle Telephone Co. has been organized for constructing telephone system from Childress to Matador.

Cleburne—Mercantile.—Chartered: Osborn, Speer & Co., with capital stock of \$15,000, by T. H. Osborn and others.

Corsicana—Mercantile.—Chartered: The S. A. Pace Grocery Co., with capital stock of \$10,000, by S. A. Pace and others.

Corsicana—Packing-house.—W. H. Booth and others are interested in the establishment of a packing-house.

Corsicana—Ice Factory.—The Corsicana Ice Co. has awarded contract for increasing its ice and storage capacity; improvement to cost \$2000.

Corsicana—Water-works.—Ralph Beaton, lately reported as having received franchise for laying pipe to supply the town, will lay about one mile of four-inch main and supply about 50,000 to 100,000 gallons per day.

Corsicana—Cotton-oil Mill.—Chas. H. Allyn is president, and R. H. Hamilton, manager, of \$50,000 company organized to build a 60-ton cotton-oil mill. Address the president.

Corsicana—Dry-plate, etc., Factory.—The Southwestern Dry Plate Co. has been organized to manufacture photographic dry plates, etc., with capital stock of \$60,000, by S. W. Boggy, Chas. W. Quinn and W. N. Bullard.

Corsicana—Cotton Mill.—The Corsicana Cotton Factory Co. has been organized to build cotton mill (lately mentioned) at a cost of \$100,000, by George T. Jester, S. W. Johnson, J. W. Edens, John Miller, J. E. Whitesell, H. S. Seales, Chas. H. Allyn and others of Corsicana, and John Taylor of Toronto, Canada.

Dallas—Coffee Company.—Chartered: The Dechman-King Coffee Co., with capital stock of \$10,000, to sell and manufacture coffees, teas, spices, etc., by James Dechman, James L. King of Dallas, Thomas Dechman of San Antonio.

Dallas—Coal Company.—Chartered: The Texas Coal Co., with capital stock of \$50,000, by B. F. Hobart of St. Louis, Mo.; C. W. Dawley and H. W. Adams of Dallas.

Dallas—Mining.—The Dallas Mining Co. has been incorporated, with capital stock of \$100,000, to conduct general mining business,

by G. C. Nunnellay, Thomas F. King, J. C. Weaver and others.

Fort Worth—Lumber Company.—The Fort Worth Lumber Co. has been incorporated, with capital stock of \$30,000, by L. B. Munfee, E. H. Harrell, O. B. Munfee and others.

Galveston—Woodworking Factory.—Chartered: C. F. Hildebrand & Co., with capital stock of \$50,000, by C. F. Hildebrand, H. L. Siegler, F. Schneider and others.

Galveston—Coffee Company.—The Southern Coffee Co. has been incorporated, with capital stock of \$20,000, by D. E. Crosland, D. E. Landis and L. B. Burk.

Giddings—Cotton-oil Mill.—A company with capital stock of \$30,000 will be organized for establishment of a cottonseed-oil mill. Names of interested parties will be announced later.

Giddings—Cotton-oil Mill.—A company has been organized, with A. E. Falke, president; W. H. Cherry, secretary, and I. J. Farris, treasurer, for the establishment of a \$30,000 cottonseed-oil mill.

Houston.—Chartered: The Houston Manufacturers' Association, by E. C. Crawford, C. N. Fisher and others.

Itasca—Cotton Mill.—A cotton-mill company has been organized, with W. H. Webb, president; F. M. Files, vice-president, and M. S. Wood, secretary, and John R. Griffin, treasurer; capital stock of \$100,000 has all been secured, and company will apply for charter.

Lott—Compress and Ginnery.—The Falls County Gin Co., lately reported incorporated, has purchased plant and is installing new machinery preparatory to beginning operations; capacity 200 round bales per day.

Lott—Flour Mill and Electric Plant.—The Lott Milling & Electric Light Co., lately reported incorporated, will erect a 75-barrel roller flour mill and an electric-light plant.

Orange—Irrigation.—Chartered: The Orange County Irrigation Co., with capital stock of \$30,000, by W. A. Ward and H. W. Potter of Beaumont, S. W. Scholars and John T. Hurt of Orange.

Paris—Drug Company.—Chartered: The Hutcheson-Elliott Drug Co., with capital stock of \$50,000, by W. C. Elliott, J. D. Elliott, T. R. Hutcheson and others.

Pecos—Sandstone Quarry.—John T. McElroy has purchased the Pecos red sandstone quarry, and will operate it, installing new machinery.

San Angelo—Water-power Company.—Chartered: The Concho Water Power Co., with capital stock of \$10,000, by J. S. Millsap, G. L. Abbott, R. Lowe and others.

San Antonio—Soap Works.—The Southern Soap Works has been chartered, with capital stock of \$15,000, by F. E. Cole, W. J. Morrison and George B. Epstein.

Schulenburg—Electric-light Plant, Ice Factory, etc.—A Mr. Anderson is organizing a stock company for establishment of an electric-light plant, ice factory and cold-storage plant.

Sherman—Sewerage System.—Franchise has been granted to J. P. Withers of Sherman, Andrew Rosewater of Omaha, Neb., and associates for the construction and operation of a \$10,000 sewerage system in Sherman.

Stamford—Flour Mill, etc.—See item under Albany.

Taylor—Brick Company.—Chartered: The Taylor Brick Co., by Peter Schramm, Julius A. Krueger and John Decker; capital stock \$15,000.

Tioga—Bottling Works.—The Tioga Mineral Wells Co., lately reported incorporated, is erecting bottling-house 24x100 feet, with capacity of 1800 cases; P. H. Street, president.

Waxahachie—Hardware.—Chartered: The Malone Hardware Co., with capital stock of \$10,000, by T. J. Tingle and others.

Waxahachie—Storage Company.—Chartered: The Waxahachie Storage Co., with capital stock of \$5000, by D. A. Thompson, R. K. Erwin and J. J. Culbertson.

Wharton—Town Company.—Chartered: The Glen Flora Town Co., with capital stock of \$10,000, by William Hood, B. W. Martin and others.

Yoakum—Cotton Mill.—Efforts are being made for the organization of a stock company to build cotton mill, as recently reported. Address Roos Bros.

VIRGINIA.

Bristol—Marble Quarry.—A. A. Shankle has discovered marble on his property, and will probably develop.

Bristol—Door and Lumber Factory.—The Bristol Door & Lumber Co. will build an addition to its plant.

Danville—Knitting Mill.—The Danville Knitting Mill has been organized, with capital stock of \$25,000 and H. S. Lanier, secretary and treasurer.

Danville—Ice Factory.—The Crystal Ice & Power Co. has been chartered for the establishment of an ice factory by D. A. Overby, president; R. L. Dibrell, vice-president; John F. Rison, W. J. Payne, J. I. Pritchett and others; minimum capital \$20,000, maximum \$50,000.

Lynchburg—Foundry and Machine Shops.—The Taylor Manufacturing Co. (lately reported incorporated) manufactures a line of turbine water-wheels, power pumping machinery, power connections, etc., having the work done under contract; company will later on build its own foundry and machine shops, but has as yet made no definite arrangements for doing so; William Hurt, president.

Mearsville—Saw-mill.—Mears & Co. have purchased 250 acres of farm and timber lands near Mearsville, and are erecting saw-mill.

Roanoke—Light and Power Plant.—The city has under consideration the erection of a light and power plant, to be operated either by water or steam-power, capacity from 300 to 500 horse-power, and to provide not less than 200 arc street lights, besides lights and power for commercial and manufacturing purposes. Address W. E. Thomas, city clerk.

Suffolk—Sewerage System.—Sewerage system will be constructed, and an engineer will be engaged. Address W. B. Ferguson, chairman special committee.

Williamsburg—Knitting Mill.—L. W. Lane, Jr., is president; Hugh S. Bird, vice-president, of the knitting-mill company lately reported to be organized for the establishment of a knitting mill. Among others interested are C. P. Armistead, R. L. Spencer, H. N. Phillips and others.

WEST VIRGINIA.

Bethany—Power-house.—A railroad power-house will be built at Bethany. Address for particulars Alfred Paul, 1120 Market street, Wheeling.

Calto—Oil Company.—The Buffalo Oil Co. has been incorporated, with authorized capital of \$25,000, by U. S. G. Ferrell and others.

Charleston—Power Plant.—The Charleston Traction Co., T. J. Carmack, manager, will build duplicate power plant, as reported lately; work to commence about April 1.

Clarksburg—Woodworking Factory.—A lathe mill will be established with capacity of between 30,000 and 40,000 per day. Address Alexander & McCann, Box 561.

Fairmont—Gold Mining.—Chartered: The Bariboo Gold Mining Co., with capital stock of \$200,000, by A. B. McDonald, F. T. Martin of Fairmont, H. S. McKinley and E. A. Brahm of Pittsburg, Pa., and others.

Franklin—Coal Mine.—The Davis Coal & Coke Co. of Davis, W. Va., will open mine at Franklin.

Huntington—Machine Shops.—The Chesapeake & Ohio Railway Co. will enlarge its Huntington shops; Geo. W. Stevens, general manager, Richmond, Va.

Huntington—Improvement Company.—The Ideal Mutual Improvement Co. has been incorporated, with an authorized capital of \$50,000, by P. Q. Payne and N. H. Gordon of Huntington, D. Stratton of St. Albans and others.

Martinsburg—Brass Works.—Rennock Hart of Pittsburg, Pa., will re-establish the plant at Martinsburg of the Brooklyn Brass Manufacturing Co. and expend about \$15,000 in improvements.

Morgantown—Bridge.—The Morgantown Bridge & Improvement Co., lately reported incorporated, has organized to construct or purchase a bridge, which is now being erected, and to develop its lands, etc. Address I. G. Lazelle.

Newburg—Coal and Coke Company.—The Orr Coal & Coke Co. has been incorporated, with authorized capital of \$100,000, by J. N. Orr, Neil J. Fortney of Kingwood, S. B. Montgomery of Tunnelton, J. M. Orr and others of Newburg.

St. Marys—Water and Light Company.—The St. Marys Water & Light Co. has been incorporated, with capital stock of \$100,000, by Robert L. Gregory and Eston Randolph of Sistersville, John B. Duffy, James Duffy and Henry Duffy of Washington, D. C.

West End (not a postoffice)—Coal and Coke Company.—The Gorman Coal & Coke Co. has been incorporated, with capital stock of \$100,000, with privilege of increasing to \$500,000, by Arthur P. Gorman, Jr., of Laurel, Md.; Edwin Wardfield and Wm. M. Gorman of Baltimore, Md., and Roy A. Hatfield of Philadelphia, Pa.

Wheeling—Machine and Electrical Company.—R. E. Schubart, Charles Menkemiller and A. H. Wiedebusch have incorporated the Novelty Machine & Electrical Co.

Wheeling—Plaster Factory.—E. M. Holliday, L. G. Hallock, Walter Marshall, G. B. Bushon and others have incorporated the Wheeling Wall Plaster Co. for the establishment of a wall-plaster factory; capital stock \$25,000.

Wheeling—Improvement Company.—W. A. Wilson, J. A. Miller, W. H. Anderson, S. C. Patterson, P. Bachman and others have incorporated the Cabanas Improvement Co., with authorized capital of \$500,000.

Wheeling—Machine Works.—The National Rotary Engine Co. has been incorporated, with capital stock of \$1000, by George W. Montgomery of Bellaire, Ohio; Lindsay Merrill, New Martinsville, W. Va.; W. A. Williamson of Wheeling and others, for the manufacture of rotary and other engines and machinery.

Wheeling—Crematory.—City Engineer White has submitted plans for a new furnace at the crematory at a cost of about \$3500.

BURNED.

Columbia, N. C.—Dry-kiln of the Branning Manufacturing Co.

Halifax, N. C.—Judge Walter Clark's hotel; estimated loss \$14,000.

Raleigh, N. C.—Power-house of the Agricultural and Mechanical College damaged to extent of \$1500.

Sacramento, Ky.—Gish & Bates' flour mills, planing mill and saw-mill; loss about \$7000.

Suffolk, Va.—Osmer D. Burpee's saw-mill at Whaley Station.

Yazoo City, Miss.—The Catholic church; estimated loss \$20,000.

BUILDING NOTES.

Atlanta, Ga.—Office Building.—A. B. Steele has purchased site for \$35,000 and will erect a six-story fireproof office building.

Augusta, Ga.—Warehouse.—Lee & Boothwell have awarded contract to the Woodward Contracting & Lumber Co. for the erection of their proposed warehouse, to be of brick and cost \$3000.

Augusta, Ga.—Hotel.—Jacob Phinzy and others are endeavoring to organize a company for erection of hotel; \$50,000 has been subscribed.

Baltimore, Md.—Shops.—The Baltimore & Ohio Railroad Co. will erect a one-story brick and iron building 54x110 feet at Mount Clare to cost \$15,000.

Birmingham, Ala.—Business Block.—The Milner & Kettig Co. has completed plans for a five-story and basement business block 106x150 feet on Twentieth street and Railroad avenue. The basement will be equipped as a machine shop. On first floor will be constructed two trolley lines for the purpose of conveying heavy machinery. Two large elevators will also be installed. Bids will be received for the work.

Chattanooga, Tenn.—Building.—Scholeze Bros. will erect a two-story brick building.

Columbus, Ga.—Tenements.—The Bibb Manufacturing Co. of Macon, Ga., will build eighty tenement-houses.

Corsicana, Texas—Dwellings.—C. T. Baister will erect a \$4000 residence.

El Paso, Texas—Theater.—J. E. Whitmore has received contract for erection of a two-story theater building 52x120 feet to cost \$10,000.

Farmville, Va.—Infirmary.—The State Female Normal School contemplates the early erection of an infirmary and bathrooms, gymnasium, steam laundry, steam-heating plant, etc.; R. Bert Fonger, president.

Florence, S. C.—Business Building.—Susie Stackley awarded contract to Silas Bounds for erection of two-story brick business building.

Greenville, S. C.—Hotel.—The Twentieth Century Hotel Co. has been incorporated, with capital stock of \$75,000, by R. E. Allen, J. A. McCullough, E. A. Gates and others.

Henderson, N. C.—Cotton-mill Building.—Harriet Cotton Mills Co. awarded contract to Robert Bunn for erection of twenty-five tenement-houses.

Irwinton, Ga.—Jail.—A new jail will be built. Address "County Commissioners."

Louisville, Ky.—Business Building.—J. Bacon & Sons are having plans made for the erection of a five-story building to cost \$100,000.

Louisville, Ky.—Warehouse.—W. B. Belknap & Co. will erect a six-story warehouse

29x189 feet to cost \$50,000. Dodd & Cobb prepared the plans.

Macon, Miss.—Courthouse.—Sealed proposals will be received by chancery clerk of Noxubee county until April 4 for erection and completion of a two-story brick courthouse complete in all its parts, according to plans and specifications on file in above office and at office of W. Chamberlin & Co., architects, Knoxville, Tenn.; bond required; usual rights reserved.

Marlin, Texas.—Hotel.—M. Levy will build a three-story brick hotel to cost \$30,000.

Millen, Ga.—Cottages.—Mill company will build fifty operatives' cottages. Address J. H. Daniel, president.

Mobile, Ala.—Hotel.—Wilcox & Geary, architects of New Orleans, La., will prepare plans for enlargement and improvement of the Battle House at Mobile, recently purchased by A. Vizard. Improvements will include a new office and lobby, steam-heating plant, refrigerating plant, electric plant, etc. For full particulars address the architects.

Mobile, Ala.—Club Building.—Zachary & Zachary of Raleigh, N. C., have been awarded contract for building the Fidelity Club building at Mobile.

Montrose, Va.—Courthouse.—The board of supervisors of Westmoreland county have adopted the plans of the B. F. Smith Fireproof Construction Co. of Washington, D. C., for the rehabilitation of the county courthouse, adding fireproof record rooms to cost \$8000.

New Orleans, La.—Jail.—Sealed proposals will be received at Comptroller W. S. Douglass' office until April 9 for erection of new police jail in accordance with plans and specifications on file in office of city engineer; \$1000 bond required; usual rights reserved.

Pine Bluff, Ark.—Opera-house.—The Southern Grocery Co. will build brick opera-house with seating capacity for 1000.

Prince George, Va.—Office.—Supervisors of Prince George county awarded contract to the B. F. Smith Fireproof Construction Co. of Washington, D. C., for fireproof clerk's office costing \$4700, after plans by B. F. Smith.

Roanoke, Va.—College Building.—The National Business College will erect a three-story building (as reported lately) 70x100 feet for gymnasium and bathrooms; capacity 600 students; Chas. E. Eckerle, president.

Tampa, Fla.—Masonic Temple.—Contract for the proposed Masonic temple has been awarded to A. H. Johnson at \$16,000.

Waco, Texas.—Station.—The Missouri, Kansas & Texas Railway system will build passenger station at Waco at a cost of \$25,000, as recently reported; A. A. Allen, general manager, St. Louis, Mo.

Washington, D. C.—Asylum.—Henry Simpson is preparing plans for the new St. Vincent Orphan Asylum, to be three stories, 23x120 feet and cost \$200,000.

Williamstown, Ky.—Store Building.—A store building to cost \$10,000 and to be lighted by acetylene gas throughout will be erected. Names of interested parties will be announced later.

Wilmington, N. C.—Store Building.—I. M. Bear & Co. have awarded contract to Zachary & Zachary for erection of brick store building 33x100 feet, with terra-cotta and stone trimmings, iron pillars, plate-glass fronts, etc. H. E. Bonitz prepared the plans.

Wanted.—Plans submitted for machine shop, with erecting floor and head room, thirty-five feet high through center or on side, sizes about 50x200 feet, brick and iron or all iron, plenty of light. Address A. W. W., Drawer 49, Aurora, Ill.

RAILROAD CONSTRUCTION.

Railways.

Allendale, S. C.—The Southern Railway Co. has surveyed a line, it is reported, from Allendale to Hardeeville, a distance of sixty miles. It is stated that this will considerably shorten the present route between Columbia and Florida.

Ashland, Ky.—It is stated that Ashland parties have purchased the property of the Sterling Lumber Co., including a tramroad about twenty-five miles long, which will be rebuilt. The line extends to timber tracts in Morgan county.

Bellington, W. Va.—The Miller Construction Co., it is reported, has secured the contract for the proposed railroad to connect Bellington with Beaver Creek. J. M. Miller is at the head of the construction company.

Birmingham, Ala.—It is stated that the

Louisville & Nashville Railway Co. has let a contract for constructing a branch six miles long to mines at Strout's Mountain. The branch will join the main line at Hanceville, Ala.

Calvert, Texas.—It is announced that the Calvert, Waco & Brazos Valley Railroad is to be extended as far as Bryan from its present terminus, a distance of twenty-five miles, and that surveys are to be made immediately. The extension is said to be in the interest of the Texas & Pacific Railroad. L. S. Thorne at Dallas is vice-president.

Charleston, S. C.—James U. Jackson, vice-president of the Chattanooga, Augusta & Charleston Railway Co., writes the Manufacturers' Record that surveys are now being completed for the line between Augusta and Charleston, also between Augusta and Athens. No arrangements have been made as yet to let contracts.

Crystal River, Fla.—The Gulf Lumber Co. has been incorporated, with R. G. Knight, president. It is understood that it intends constructing a railroad to timber lands which it controls, also operating a steamboat line.

Denison, Texas.—The St. Louis, San Francisco & Texas Railroad Co. has been chartered in Texas to represent the division of the St. Louis & San Francisco system which is being constructed between Denison and Sapulpa, I. T. The incorporators of the new company include R. F. Yeakum and D. B. Robinson.

Denison, Texas.—The Hedges-Gosney Construction Co. writes the Manufacturers' Record that it has secured contracts for mason work upon the railroad being constructed between Sapulpa and Denison. The company's main office is at Noel, Mo.

Elkins, W. Va.—The Coal & Iron Railway is to be constructed as soon as possible, and the engineers are ready to receive bids for grading and mason work. It will be forty-three miles in length, extending from the West Virginia Central & Pittsburgh Railway at Elkins to a connection with the branch of the Chesapeake & Ohio now being constructed along the Greenbrier valley. John W. Moore at Elkins is engineer in charge, and C. H. Latrobe, 812 Merchants' National Bank Building, Baltimore, consulting engineer.

Fairmont, Va.—The Pittsburgh & Fairmont Acetylene Railroad Co. has been chartered, with capital stock of \$5,000,000, to build from Fairmont to the West Virginia State line by way of Blackville and Rivesville.

Fayetteville, N. C.—It is reported that the Raleigh Railroad & Lumber Co. has been organized and will construct a narrow-gauge line from Greenville to Fayetteville.

Fitzgerald, Ga.—Messrs. Buck & Schnare, contractors for the railroad now being constructed toward Fitzgerald, write the Manufacturers' Record that rails have been secured and other material for the work under contract. No contracts will be sublet.

Fort Worth, Texas.—A. T. Byers is interested in a company being formed called the Fort Worth, Corsicana & Sabine Pass. The company is to be capitalized at \$400,000, and proposes building from Fort Worth to Sabine Pass by way of Corsicana, a distance of 225 miles.

Franklin, Tenn.—T. J. Redmond and S. Webb are interested in the Franklin Terminal Co., recently chartered to build railway lines.

Gulfport, Miss.—It is stated that a railroad is being promoted to extend from Gulfport by way of Hammond to Baton Rouge, La., a distance of 120 miles. The Business Men's League of Hammond is interested in the matter.

Harriman, Tenn.—J. E. Rodes, general manager of the Harriman & Northeastern Railway Co., advises the Manufacturers' Record that surveys have been made for an extension from Stevens to Wartburg, Tenn., a distance of nine miles. The financial arrangements have not been completed for its construction.

Houston, Texas.—The Texas Pacific Railway Co., it is stated, has purchased fifty miles of 75-pound rails, which, it is understood, will be placed upon the International & Great Northern division between Houston and Longview. L. S. Thorne at Dallas, Texas, is vice-president.

Jacksonville, Fla.—C. S. Hammatt and others are interested in forming a company to build a belt line in the suburbs, which will connect the Atlantic, Valdosta & Western, the Florida Central & Peninsular railroads and the wharves of the Clyde Steamship Co.

Jacksonville, Fla.—It is stated that the Florida East Coast Railway Co. has determined to extend its branch, recently completed to Pablo Beach, to Mayport, a dis-

tance of thirteen miles, making the total length of the branch thirty miles. J. R. Parrott at St. Augustine, Fla., is general manager of the company.

Jefferson, Texas.—It is expected that the extension of the Missouri, Kansas & Texas system from Waskom to Jefferson will be graded by May 1, and will be ready for operation by September 1. All of the contracts have been let.

Johnson City, Tenn.—The Johnson City Board of Trade is agitating the question of building a line from Johnson City to a connection with the Virginia & Southwestern Railway. Among those interested are M. Jackson and J. A. Martin.

Joplin, Mo.—It is stated that the Kansas City, Pittsburg & Gulf Railway Co. is making surveys for a branch about four miles long in the vicinity of Joplin. The chief engineer may be addressed at Kansas City, Mo.

Keyser, W. Va.—It is reported that the Baltimore & Ohio has determined to enlarge its yards at Keyser and to make other improvements. J. M. Graham at Baltimore is chief engineer.

Knoxville, Tenn.—It is stated that the Southern Railway Co. has let a contract to James Worthington of Coal Creek, Tenn., to construct a branch about two miles long to mines of the Minersville Coal Co.

Laurel, Miss.—The Kingston Lumber Co., which is constructing a standard-gauge road from Laurel to Forest, a distance of fifty-five miles, has completed about ten miles of the road ready for operation.

Little Rock, Ark.—The city council has passed an ordinance granting the Choctaw, Oklahoma & Gulf Railroad Co. a franchise to construct its tracks within the city limits. Henry Wood at Little Rock is general manager of the company.

Marlin, Texas.—The business men of Marlin have made arrangements to secure the extension of the Calvert, Waco & Brazos Valley Railroad to that town. The new line will form a branch of the Texas & Pacific system. L. S. Thorne at Dallas is vice-president of the Texas & Pacific.

Nashville, Tenn.—It is stated that the Nashville, Chattanooga & St. Louis Railway Co. has completed surveys of a route from Bon Air, Tenn., to Pikeville. The estimated distance is forty miles. The line, if built, will traverse extensive coal deposits in Cumberland county. J. W. Thomas, Jr., at Nashville is general manager of the company.

New Orleans, La.—A report is current that the Illinois Central has determined to enlarge the capacity of its proposed yards at Harahan, near New Orleans. With the enlargements they will comprise about fifty miles of track.

Newport, Tenn.—The Tennessee & North Carolina Railroad Co. has been organized, with \$50,000 capital, to build a line from Newport to a point in North Carolina in Haywood county.

Paris, Texas.—Henry McDonald of Paris and W. C. Preston of Dallas, Texas, are interested in a railroad company which is being formed to build a line between Paris, Dallas and other points in the State.

Portsmouth, Va.—It is reported that contracts have already been let for the electric line between Portsmouth and Pig's Point, and that work has already begun. The line will be about ten miles in length, and extend to a point opposite Newport News, with which it will be connected by ferry. H. L. Maynard at Portsmouth is president of the company.

Richmond, Va.—It is stated that work will probably begin about July 1 on the Richmond & Tidewater Railroad, now being promoted. It is stated that representatives of the Standard Oil Co. are interested in the line, which will extend from the coal and oil territory in West Virginia to Gloucester Point, on Chesapeake bay.

Shenandoah, Va.—The Empire Steel & Iron Co., which controls the Shenandoah furnace, writes the Manufacturers' Record that the railroad recently referred to will be five miles in length, extending from the Norfolk & Western to mines at Massanutten. It is now being constructed. W. L. Sims is general manager of the Empire Company, Empire Building, New York.

Sherman, Texas.—It is announced that the Chicago syndicate which is interested in the proposed electric line between Sherman and Denison has secured control of the street-railway systems in both cities, and that the work of building the line between the two communities will commence at once. The Western people are acting in connection with J. P. Withers of Sherman, who has been promoting the enterprise. It is calculated that the line between the cities will cost about \$500,000.

Stamps, Ark.—The Arkansas, Louisiana & Southern Railway Co. has begun construction of extension south from Jamestown, La., and it is stated that rails are being laid at the rate of three-quarters of a mile daily. William Buchanan at Stamps is president of the company.

St. Louis, Mo.—It is reported that the Fort Scott Central Railway Co., organized in Kansas, will build a line in Missouri which will cost about \$650,000. The headquarters of the company are announced as at St. Louis.

Thomasville, Ala.—It is reported that Messrs. Wilkins, Park & Co. of Pine Hill, Ala., have secured the contract for constructing the railroad line which will extend between Sweet Water and Nannafalla, Ala. The road will be about thirty-eight miles in length. J. D. Jones of Thomasville is one of the promoters of the enterprise.

Weatherford, Texas.—It is announced that a contract has been let for the construction of the Chicago, Weatherford & Brazos Valley Railroad for its entire length between Waco and a point in Wise county. The estimated distance is 150 miles. Hon. W. A. Squires at Henrietta, Texas, is president of the company. The Weatherford Construction Co. has secured the contract.

Webb City, Mo.—The Missouri Pacific Railway Co. is constructing a line between Cornwell, Kans., and Webb City, a distance of twenty miles. W. B. Doddridge at St. Louis is general manager of the company.

Wheatley, Ark.—The Maberry, Cotton Plant & Wheatley Railway Co. has been incorporated, with \$500,000 capital stock, to build a railroad from Maberry, in Woodruff county, to Wheatley, a distance of thirteen miles. W. T. Price is president, and Robert C. Lynch, treasurer.

Wheeling, W. Va.—Alfred Pauli, one of the promoters of the road between Wheeling and Bethany, W. Va., writes the Manufacturers' Record that surveys are being made from Wheeling to Lazearville by way of Bethany and Wellsburg, a distance of twenty-five miles.

Street Railways.

Baltimore, Md.—John S. Waters, A. C. Dunn and others are interested in the Baltimore County & City Railway Co., which is being formed to build a line in the city and suburbs. It is capitalized at \$50,000.

Franklin, Tenn.—T. J. Redmond and J. B. Lillie are interested in the Franklin Terminal Co., recently formed to construct an electric line in the town. It is capitalized at \$20,000. Application has been made for a right of way.

Henderson, Ky.—It is reported that the Henderson Street Railway Co. is to be reorganized, and that the line which controls it may be extended and improved in various ways.

Natchez, Miss.—A correspondent of the Manufacturers' Record writes that the question of building an electric line depends considerably upon the consolidation of the power plants now in operation in the city. Chicago parties are interested in the matter, including J. C. Shaffer, who is president of the Vicksburg Railroad, Light & Power Co.

Parkersburg, W. Va.—The Citizens' Traction Co. has been organized, with \$150,000 capital, by J. L. Cramer, C. R. Forner and others of Parkersburg.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Agricultural Machinery.—John H. Helms, Ball Play, Ala., wants prices on small horse-power threshers.

Air Drills.—See "Machine Tools."

Belting.—See "Woodworking Machinery."

Boiler and Engine.—Carthage Furniture Co., Carthage, N. C., wants estimates on 40-horse-power engine and 60-horse-power boiler.

Boiler and Engine.—Leonard Vyne, North Wilkesboro, N. C., is in the market for a

new or second-hand 15-horse-power portable boiler and engine.

Boiler and Engine.—See "Woodworking Machinery."

Boilers.—See "Naval Supplies."

Boilers and Engines.—See "Bridge Plant."

Bolts and Nuts.—Messrs. A. Schoenfeld & Co., 21 Hope street, Glasgow, Scotland, want addresses of makers of bolts and nuts.

Bottling Equipment.—Tioga (Texas) Mineral Wells Co., P. H. Street, president, wants to purchase bottling equipment, including shafting and belting, three ceiling fans, one bottling table, Hutchins stopper, syrup pump, etc.

Brass Workers.—J. S. Webster, Herndon, Va., wants to correspond with brass workers relative to the manufacture of a patent brass cuff-holder.

Bridge.—Proposals will be received until April 6 for the construction of a bridge, to have three spans resting on stone, main span 144 feet; two approach spans of ninety feet each to be built in panels of eighteen feet each, 16-foot clear roadway and 100 pounds capacity per square foot; strain sheets required; payment in county warrants; bridge to be delivered f. o. b. cars at Jasper, Ala., by July 1. Address Jas. W. Shepherd, judge of probate, Jasper, Ala.

Bridge Plant.—Grotton Bridge & Manufacturing Co., Grotton, N. Y., is in the market for a complete bridge plant, including engines, boilers and electric machinery.

Buggy Machinery.—J. H. McCormick, Owensboro, Ky., will need such power and machinery as is used in the manufacture of buggies.

Builders' Supplies.—Henry M. West, secretary Builders' Exchange, Savannah, Ga., wants manufacturers of and dealers in builders' supplies to send catalogues, etc.

Building Materials.—Carolina Portland Cement Co., P. G. Hanahan, secretary and manager, Charleston, S. C., is in need of a carload of each of the following: Roofing and sheathing papers, roofing slate, fire-brick, best quality; plastering hair; also a lot of 1000 barrels plaster paris and cargo of 3000 barrels of Rosendale cement.

Cement.—See "Building Materials."

Cinder Ladies.—Eliot A. Kebler, No. 52 Ninth street, Pittsburg, Pa., has an inquiry for five or six side-dump cinder ladies, standard gauge.

Cotton Gin.—C. R. Sprott, Jordan, S. C., wants catalogues and prices on two 60-saw gins, with elevator, feeders and condensers and single-box steam tramping press.

Cotton-ginners' Supplies.—Mandarin Fiber Works, Mandarin, Fla., wants addresses of manufacturers of cotton-gin supplies; wants to purchase rolls.

Cotton Mill.—Chas. Warren Davis, No. 5 Library Building, Augusta, Ga., wants to correspond relative to contracting for a 25,000-spindle and 750-loom mill.

Cotton Mills.—J. S. James, Douglasville, Ga., will want machinery for two 10,000-spindle cotton mills. New Century Cotton Mill, J. S. James, president, will want to buy at once 20,000 spindles and 600 looms.

Cotton-rope Machinery.—J. D. Johnston, Box 31, Canton, Ga., wants addresses of manufacturers of rope machinery.

Electrical Machinery.—See "Bridge Plant."

Electrical Machinery.—L. H. Simmons, Rocky Mount, N. C., wants a 150-light dynamo.

Electrical Machinery.—W. T. Bryan, Athens, Ga., will be in the market for water-wheels and electrical machinery for water-power development.

Electrical Supplies.—W. J. Rice, Morehead, Ky., wants to correspond with manufacturers of water pipe, pumps, dynamos and water-works and electric-light supplies.

Electric Fans.—Tioga (Texas) Mineral Wells Co., P. H. Street, president, wants to buy three ceiling fans.

Electric-power Plant.—J. P. Hornaday, Somerset, Ky., wants estimates on light and power plant.

Elevator.—Southern Grocer Co., Limited, Monroe, La., is in the market for hydraulic elevator.

Engine.—Tioga (Texas) Mineral Wells Co., P. H. Street, president, wants to buy four to six-horse-power gasoline engine.

Excelsior Machinery.—Howard Bros., Lock Box 12, Dublin, Ga., want to correspond with manufacturers of excelsior machinery.

Foundries.—See "Gear Manufacturers."

Furniture.—National Business College, Chas. E. Eckerle, president, Roanoke, Va., will be in need of school furniture.

Furniture Machinery.—See "Woodworking Machinery."

Gasoline Engine.—See "Engine."

Gear Manufacturers.—W. H. Freeman, Sumter, S. C., wants addresses of manufacturers of gears.

Heating Apparatus.—National Business College, Chas. E. Eckerle, president, Roanoke, Va., will be in need of heating apparatus, etc.

Hosiery Mill.—See "Knitting Mill."

Ice-box Manufacturers.—Lyle Ice & Trading Co., Braidenton, Fla., wants to correspond with manufacturers of ice boxes.

Ice Machinery.—J. P. Hornaday, Somerset, Ky., wants estimates on ice machinery.

Iron Furnaces.—See "Rolling Mill."

Ironworking Machinery.—J. H. Mahler, Durham, N. C., wants names of parties who can bend galvanized iron into triangle-shape tubes of about one inch in diameter.

Iron Works.—See "Bridge Plant."

Knitting Machinery.—H. Y. Tillman, Valdosta, Ga., is in the market for underwear machinery.

Knitting Mill.—M. A. Henderson, Rutherfordton, N. C., wants estimates on cost of small hosiery mill.

Lifting Jacks.—See "Machine Tools."

Light and Power Plant.—W. E. Thomas, city clerk, Roanoke, Va., wants to correspond with parties furnishing light and power plants relative to the erection of such a plant; to be operated by water or steam power; capacity from 300 to 500 horse-power, and to provide not less than 200 arc street lights, besides lights and power for commercial and manufacturing purposes.

Machine Tool.—Warrior Machine Works, Birmingham, Ala., is in the market for a car-wheel boring machine for boring 33-inch wheels, new or second-hand.

Machine Tools.—L. T. Brown, Radford, Va., wants to buy two second-hand 10-ton lifting jacks.

Machine Tools.—Howard Bros., Lock Box 12, Dublin, Ga., want new double-spindle lathe about 24x48, second-hand slide planer about six or eight-foot bed, not to take in less than 32x32.

Machine Tools.—John F. Riley, 6 South street, Charleston, S. C., will need second-hand 21-inch drill press, four-foot planer, bolt cutter to cut from three-eighths to one and one-half inches.

Machine Tools.—W. H. Dexter, Valdosta, Ga., wants cuts and prices from manufacturers of pneumatic air drills and hammers and chipping and caulking tools.

Match Machinery.—R. E. Burchett, Greenwood avenue, Clarksville, Tenn., wants to correspond with manufacturers of match machinery.

Naval Supplies.—Proposals will be received at the bureau of supplies and accounts, Navy Department, Washington, D. C., until March 20 to furnish at the navy-yard at Pensacola, Fla., two electric generating sets and one battery of three 80-horse-power boilers complete. Blank proposals will be furnished on application to the navy-yard, Pensacola; A. S. Kenny, paymaster-general, United States Navy.

Oil Mills.—C. R. Sprott, Jordan, S. C., wants prices on small oil mills.

Paint Machinery.—Carolina Gas & Chemical Co., P. O. Box 17, Washington, N. C., wants to correspond with manufacturers of paint-making machinery, especially mixers and bolters.

Pipe.—A. L. Adamson, president Manchester (Va.) Light, Heat & Power Co., will want to purchase pipe for gas plant.

Piping.—J. C. Jackson & Sons, Wilsonville, Ala., are in the market for second-hand eight-inch wrought-iron pipe.

Piping.—O'Neill Manufacturing Co., Rome, Ga., wants to buy from 6000 to 10,000 feet of one-inch pipe, second-hand preferred.

Piping.—Carolina Gas & Chemical Co., P. O. Box 17, Washington, N. C., wants to correspond with makers of piping that will withstand the action of pyroligneous acid.

Piping.—See "Woodworking Machinery."

Plumbing.—C. H. Denny, superintendent, Reidsville, N. C., wants to correspond with contractors for plumbing.

Pneumatic Machinery.—See "Machine Tools."

Power Plant.—Charleston (W. Va.) Traction Co., T. J. Carmack, manager, will build duplicate power plant, and wants machinery and supplies.

Railway Construction (Masonry, etc.).—Proposals will be received until April 15 for the graduation and masonry of railway extending forty-three miles, exclusive of two tunnel sections already let, for the Coal & Iron Railway. Form of proposal and specifications can be had on application. Address

C. H. Latrobe, consulting engineer, Room 812 Merchants' Bank Building, Baltimore, Md.

Railway Equipment.—See "Cinder Ladies."

Railway Equipment.—Baldwin & Lowe, Lenox, Ga., want to buy a Shay engine to weigh about twelve to fourteen tons.

Railway Equipment.—Creighton Clay Co., L. E. Chamberlin, president, Creighton, Mo., is in the market for 400 feet 16-pound T rails.

Refrigerator Manufacturers.—See "Ice-box Manufacturers."

Renovating Machinery.—R. D. Cherry, Greenville, N. C., wants addresses of manufacturers of machines for renovating feathers.

Reservoir.—See "Well-boring Contractors."

Rolling Mill.—Peter Ariund & Co., Louisville, Ky., want to purchase a rolling-mill outfit.

Roofing Felt.—W. E. Hamilton, Shreveport, La., wants the names of manufacturers of dry roofing paper ready to be treated with tar.

Saw.—W. A. Mathews, Wildersville, Tenn., wants to buy one second-hand 16-inch one-half bed saw (Whitney preferred).

Saw-mill.—Central Phosphate Co., Paul Hirtzel, secretary and treasurer, Ocala, Fla., wants prices for complete machinery for a 10,000 feet per day saw-mill; prices to include freight to Hernando, Fla.

Saw-mill.—Alabama Pine Lumber Co., P. O. Box 133, Montgomery, Ala., is in the market for a new or second-hand saw-mill outfit complete to cut about 20,000 to 25,000 feet rough lumber per day; want 40-foot carriage with three headblocks.

Saw-mill Machinery.—Mears & Co., Mearsville, Va., are in the market for one or two cylinder stave saws, second-hand, from eighteen to twenty-two inches diameter.

Sewerage.—W. B. Ferguson, chairman special committee, Suffolk, Va., wants bids from civil engineers for survey for sewerage system.

Shafting and Pulleys.—See "Woodworking Machinery."

Shuttle and Bobbin Machinery.—H. G. Hall, Shelby, N. C., wants full equipment of shuttle and bobbin machinery (except boiler and engine).

Shuttle Machinery.—H. E. Thompson, Fulshear, Texas, wants machinery for making shuttles.

Steaming Apparatus.—See "Renovating Machinery."

Steel and Iron Goods.—Messrs. A. Schoenfeld & Co., 21 Hope street, Glasgow, Scotland, want addresses of makers of tube strips, steel beams, channels, tees, plates, sheets, etc.

Textile Machinery.—See "Cotton-rope Machinery."

Textile Supplies Machinery.—See "Shuttle and Bobbin Machinery."

Water-wheels.—See "Electrical Machinery."

Water-works Supplies.—See "Electrical Machinery."

Well-boring Contractors.—Henry S. Nagen-gast, Franklin avenue, Gardenville, Md., wants to communicate with artesian well diggers and wants estimates for placing a reservoir, either wood or steel, of capacity of 20,000 gallons.

Well-boring Machinery.—W. C. Zimmerman, Inverness, Fla., wants to communicate with manufacturers of well-boring machinery.

Woodworking Machinery.—See "Shuttle Machinery."

Woodworking Machinery.—Jon. A. Rogers, Hartselle, Ala., wants to buy a second-hand resaw.

Woodworking Machinery.—Leonard Vyne, North Wilkesboro, N. C., is in the market for a second-hand double surfacer.

Woodworking Machinery.—Carthage Furniture Co., Carthage, N. C., wants estimates on belting, pulleys, shafting, piping and machinery for manufacture of furniture moldings, etc.

Woodworking Machinery.—J. B. Cox, 319 Harrison street, Portsmouth, Va., wants to buy a lath mill, either new or second-hand.

Woodworking Machinery.—Ben. A. Neal, Elberton, Ga., wants to buy machinery for turning spokes, singletrees and axe-handles.

Woodworking Machinery.—S. W. Parker, president Oxford (N. C.) Furniture Co., is corresponding relative to purchasing furniture machinery.

Woodworking Machinery.—Alexander & McCann, Box 561, Clarkesburg, W. Va., want a second-hand lath machine, with bundler, capacity between 30,000 and 40,000 per day.

Woodworking Machinery.—W. B. Dodge, Sturms Draft, Va., wants to buy a boring machine for making split and caned-bottom chairs; wants machine to bore three holes at once, adjustable so that the holes can be bored five to six inches apart.

Woodworking Machinery.—E. H. Wilkes, Laurens Furniture Manufacturing Co., Laurens, S. C., will need 100-horse-power engine; 125-horse-power boiler, with flushed front, with automatic opening, so that shavings can feed into furnace; complete dust collector; steam pipe, shafting, hangers, pulleys and belting; planer and smoother, thirty inches, six inches thick; hand jointer, twenty inches wide; 10-inch four-side molder; eight-inch four-side molder; band resaw, with reversible table, to saw twenty inches wide, six inches thick; double cut-off saw to cut from six inches to six and one-half feet; double tenoning machine, automatic feed; automatic glue-joining machine to work stock up to six and one-half feet; swing cut-off saw; double shaping and frieze machine; carving machine, with iron column extending to floor; single spindle and disc sander, with head one, two and three inches diameter; post-borer, with adjustable table; bench borer; self-feed rip saw, with improved ripping fence and one 16-inch saw; automatic knife-grinding machine for knives up to thirty-two inches, with one 16-inch emery wheel and countershaft on machine; double emery wheel stand, with two adjustable rests; lathe, wood-turning, 12-inch swing; dovetailing machine; triple-driven power-feed sander, thirty-six and forty-two inches.

TRADE NOTES.

Pine Timber Land.—R. T. Poole of Troy, N. C., is offering for sale 20,000 acres of pine timber lands located in Florida.

New York Blower Co.—The New York Blower Co.'s New England office at Boston will be in charge of Mr. Alex. D. Morgan (not "Brown," as was stated last week in error).

Inducements for Factories.—Among the Southern towns offering inducements for the location of factories is Port Deposit, Md. For particulars of the inducements address the Town Improvement Association.

TRADE LITERATURE.

Pine Products, etc.—The Carolina Gas & Chemical Co. of Washington, N. C. (P. O. Box 17), has issued a leaflet relative to its "Peerless" brand of pine products and high-grade tar, disinfecting compound, composition paint, wood preservative, sheep dip, etc.

Garden Hose.—Probably of no commodity can it be more truly said "the best is the cheapest" than of rubber hose. Whether a hose is of high or low grade, its cost of labor for making is about the same, and it is therefore apparent that reductions in price of the finished article can only be made by using an inferior quality of material. For many years the Boston Belting Co. has enjoyed an enviable reputation for the excellence and durability of its hose, and has merited the confidence of the public throughout the country. A pocket catalogue of the garden hose manufactured by the company has been issued recently, with reference also to a number of hose supplies and necessities which the company also makes. Address the Boston office at 256 Devonshire street.

Electrical Machinery.—The excellence of the detail of electrical apparatus is the point that interests users. This excellence is presented in the catalogue just issued by the Triumph Electric Co. of Cincinnati. This company has in the past issued bulletins of its various types of machines, and, wishing to assemble these various editions, has compiled the present catalogue. Fuller description is added and illustrations are shown from photographs of actual installations. The Triumph Electric Co.'s apparatus has been long and favorably known in the market, and is as strictly high grade as the most stringent inspection and attention to every detail, combined with the highest class workmanship and engineering ability, can make it. Interested parties can have a copy of catalogue on application.

Many Expressions One Opinion.—All manufacturers whose products require abrasive work in any of the operations making them ready for market should find of great interest the booklet entitled "Many Expressions One Opinion." This booklet is handsomely illustrated and printed, presenting samples of many expressions of a kindred nature which the Carborundum Company is constantly in receipt of from intelligent manufacturers throughout the country. The "car-

borundum" products which these letters recommend for their general efficiency are more and more coming into use in suitable forms for all lines of abrasive work. Many users of emery and corundum have written stating the superiority of "carborundum" products over those abrasives. Carborundum products appeal to all those using or about to use abrasive materials, their economical features being of especial value. Booklet on application to the company at Niagara Falls, N. Y., where its office and extensive factory is located.

"Rainbow" Packing.—"Rainbow" packing is especially adapted for very high pressure, and is not affected by any degree of steam heat. It will not harden under any degree of heat or blow out under the highest pressure, and will make an air, steam, hot or cold-water joint equally well. Its manufacturer further claims that it is not affected by oils, ammonia, liquors, steam, heat or alkalis. Unlike plumbago and usudrian, it will not harden or crack. Joints can be made and broken in one-eighth the time consumed with packings that harden, as a tool is not required to break or face off joint. Steam-heating companies can make thousands of joints in new plants without the use of steam, with the assurance and guarantee that when steam is applied every joint will be perfectly tight, saving the labor of baking and following up, etc., as is the case, this manufacturer continues, when usudrian or plumbago packings are used, thereby saving from 100 to 300 per cent. in labor and time. The latest booklet concerning this packing can be obtained from the maker, the Peerless Rubber Manufacturing Co. of 16 Warren street, New York.

Riedler Compressors and Blowing Engines. The success of the air compressor devised by Professor Riedler followed close after that of his blowing engine. The principle involved in the Riedler pump was applied to the engine for compressing air and gas, and an efficient machine was the result of that application. The merits of the compressor have made it largely used through the world, and the growing demand for it has prompted its manufacturers lately to issue a special catalogue devoted to it. The recognized value of these machines in the departments to which they are applicable has been a source of profit to many industrial companies and firms. Those who are at present, or who contemplate, operating plants where in such machinery can be made available are invited to send for catalogue of the Riedler compressor or to write the manufacturers, Messrs. Fraser & Chalmers, of Chicago, for full particulars concerning it. This company has offices through the world, and will furnish single machines, parts or complete plants for any purpose. It matters not in what part of the world the plant is required, nor what the difficulties to be overcome, if success is at all possible, Messrs. Fraser & Chalmers can attain it for their patrons.

Consolidation of Southern Lime Interests.

The firm of Sperry, Jones & Co. have taken a leading part in placing Baltimore in the front rank of our great financial centers. They have originated many large and important issues of securities. Five years ago they were among the first to take advantage of the lessening value of money, and as a result engaged in large refunding operations for Southern cities like Lynchburg, Danville, Atlanta, Mobile and Montgomery, procuring a higher credit for these cities than ever before enjoyed. They have handled large loans of the State of Maryland and city of Baltimore, having recently purchased \$875,000 of city stock, for which they paid \$990,218.25 and sold it at \$114½, thereby establishing new high record of city of Baltimore stock. They promoted and carried to a successful issue water-works and sewerage systems for Mobile and Montgomery, and the street railway system of Charleston, S. C., and have dealt largely in government bonds. They purchased the York Southern Railroad, and are lending their energies toward giving Baltimore another independent railroad system northward. They are also engaged in the consolidation of the lime industry of seven Southern States, as outlined elsewhere in this issue, and to which attention is invited.

FINANCIAL NEWS.

The Manufacturers' Record invites information about Southern financial matters, items of news about new institutions, dividends declared, securities to be issued, openings for new banks, and general discussions of financial subjects bearing upon Southern matters.

Tennessee Coal & Iron Securities.

The Tennessee Coal, Iron & Railroad Co. announces that holders of two-thirds of the preferred stock have agreed to an increase in the common stock from \$20,000,000 to \$23,000,000. Of the new stock \$1,800,000 will be applied to the retirement of the preferred stock, and the remaining \$1,200,000 will be sold to reimburse the treasury for advances in the acquisition of the three Sheffield furnaces, 370 coke ovens and 72,000 acres coal lands; in the construction and equipment of the steel plant of the Alabama Steel & Shipbuilding Co., together with the foundry and machine shops, the proceeds of the securities of that company having proved insufficient to fully construct and equip such plant, and no provision having been made in the original estimates for foundry and machine shops; in the acquisition of ore lands needed to supply ores to the Sheffield furnaces, and the acquisition of the Bessemer rolling-mill plant and equipment.

Another Southern Dividend.

The Southern Railway Co. announces a dividend of 1½ per cent. on its preferred stock, payable April 6. This makes a total of 3½ per cent. in dividends declared since October, 1899. The report of the company for the last seven months ending January 31, 1900, shows the net earnings to be \$6,168,000, with other income amounting to \$192,500. After deducting interest and rentals a balance available for dividends amounts to \$2,425,000, although the dividend last declared of 1½ per cent. amounts to but \$900,000. It is interesting to note that the net earnings of the company for the last six months of 1899 aggregated \$5,398,000, an increase over the preceding year of \$688,000, or nearly 15 per cent.

Large Railway Dividend.

The South Georgia Railway Co. at its last meeting declared a dividend of 10 per cent. This company is the one recently referred to in the Manufacturers' Record as proposing to build an extension to Tampa, Fla., a distance of about 200 miles. This line is in operation between Quitman and Heartpine, Ga., a distance of twenty-eight miles.

New Corporations.

A new bank has been organized at Luverne, Ala., with a capital stock of \$50,000.

The Farmers' Investment Co. has been formed at St. Joseph, Mo., with E. J. Lee and others.

The Charlotte Loan Co. has been organized at Charlotte, N. C., by W. C. White and others.

The Florida Savings & Loan Co. has been organized at Jacksonville, Fla., by Arthur F. Perry and others.

William T. Roberts and others are interested in the American Life Insurance Co., recently organized at Baltimore.

The Farmers' Investment Co. has been formed to do business at St. Joseph, Mo., with \$10,000 capital stock, by Edward J. Lee and others.

N. B. Dial is interested in the Enterprise Bank, which has been authorized to do business at Laurens, S. C., with \$50,000 capital stock.

Hon. William P. Bouie of Rockville, Md., is interested in the organization of

a trust company which will have its main office at Rockville.

The Ideal Investment Co. has been organized at Huntington, W. Va., by W. H. Gordon of Huntington and others. It is capitalized at \$50,000.

C. L. Bretz, D. P. Miller and others have formed the Interstate Trust & Guarantee Co. at Cumberland, Md. It is capitalized at \$500,000.

Theodore Hooper, John R. Dorsey and others of Baltimore have organized the Patapasco Investment Co., with an authorized capital of \$1,000,000.

Arrangements have been made to open the Blue Ridge Bank, recently organized at Blue Ridge, Ga., immediately. J. H. Carter is the principal promoter.

Bills are pending in the Maryland legislature to incorporate the Tidewater Fire Insurance Co. at Cambridge, Md. Among those interested are J. W. Woolford and John W. Mills.

George W. Evans and R. S. Hill are promoters of the Fidelity Loan Association, which has received a commission to do business at Anderson, S. C., with \$25,000 capital stock.

John T. Whitehurst and William Mohr of Baltimore are interested in a company which intends to do business under the title of the Southern Trust & Deposit Co. It is capitalized at \$250,000.

Isaac L. Straus and E. J. Dowell are interested in the Imperial Provident Society being organized at Baltimore with \$100,000 capital stock. The organization will do an insurance and loan business.

The Southwestern Trust and Banking Association of Pine Bluff, Ark., recently organized, is capitalized at \$25,000. J. M. Donohue is president; F. M. Sued, vice-president, and O. W. Fletcher, secretary.

New Securities.

The Bank of Madison, Fla., has purchased the issue of \$16,000 in 5 per cent. town bonds at 101.

George E. Giddon of Charleston, S. C., has purchased an issue of \$9500 worth of bonds of Greenville at 106½.

A bill is pending in the Maryland legislature authorizing the city of Baltimore to issue \$5,000,000 in stock for street-paving.

The finance commissioners of Baltimore have purchased \$256,500 worth of the \$4,000,000 loan authorized for the new courthouse for the city sinking fund.

Edwin C. Hopkins, clerk, will receive bids until March 20 for \$5000 in 6 per cent. bonds of Dorchester county, Md. He may be addressed at Cambridge, Md.

The issue of \$10,000 in 6 per cent. warrants of Etowah county, Alabama, remain unsold. The board of county commissioners may be addressed at Gadsden, Ala.

Local investors have secured the issue of \$150,000 in second-mortgage bonds recently offered for sale by the Louisville Street Railway Co. The prices paid ranged from 105½ to 105¾.

The bonds which are to be voted for by the city of Dallas, Texas, include \$35,000 for street improvements, \$100,000 for water-works and \$15,000 for a crematory. The mayor may be addressed.

Dividends and Interest.

The Columbus Light & Heating Co. of Charleston, W. Va., announces a dividend of 2½ per cent.

Fans and Their Motors.—The Western Electrical Supply Co. of St. Louis has issued two catalogues—one on direct and the other alternating current fan motors and ceiling fans. For alternating currents this company offers the new model 1900 "Emerson" desk fan motors and ceiling fans. The company has handled this fan for some years. The "Emerson" fan is too well known to need description. This year's fan has a few

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minor improvements over last year's, but nothing radical, as it has been nearly perfect electrically and mechanically. Especial attention is called to the "Parker" noiseless blades with which all the company's fan motors are equipped. These are patented. They do away almost entirely with that disagreeable humming noise which nearly all desk fans make. For direct current is offered "Peerless" desk fan motors and ceiling fans. Shipments of these fans for any voltage can be made. The "Peerless" fan is simply and strongly made, graceful in appearance and practically noiseless in operation; it has self-oiling and self-aligning bearings and self-adjusting carbon brushes; it has the highest possible efficiency, and its price is low. Catalogues on application.